The Obstetric Gazette.

Vol. VIII. — MAY, 1885. — No. 5.

Original Articles.

A CASE OF DERMOID OR PILIFEROUS TUMOR, WITH CURE BY SPONTANEOUS OPENING INTO THE INTESTINE.

Read before the College of Physicians, Philadelphia, March 4th, 1885.

By Walter F. Atlee, M.D.

M.C., residing at 1014 Carpenter street, in this city, came to me in May, 1884, on account of a lump she had that day discovered in the lower part of the belly. She was 32 years of age, of medium size, with the appearance of good health. Her menses always came regularly every four weeks; never were profuse; and, as a general rule, lasted but two days.

This lump appeared to be egg-shaped, the long diameter in the direction of the spinal column, in size perhaps six inches in its greatest length, and placed rather above the womb, and somewhat to the left of the median line. She complained of pain and of obstruction to the passage of the stool. For this condition the use of a pill composed of opium and of the compound extract of colocynth was advised. A few days afterwards, on account of complaint of difficulty in passing the urine, a drink of bitartrate of potassa was recommended for use. In July, on account of troubles of digestion, bismuth and strychnine were prescribed, to be used before meals, and pills of carbonate of iron to be taken after. Early in September pills of ergotine were ordered, and their use was continued again in October and in November and December. During this time the lump appeared to be growing rather smaller, and it was certainly becoming softer. On the 11th of November a considerable quantity of matter like thick gruel, white, and with no odor, came away from the bowel. This, under the microscope, was seen to be composed of the exfoliated epithelial cells and the secretion from sebaceous glands. This continued to come from time to time, and as it did, the lump became smaller. On the 10th of January hair began to come, some of it long and very black, and the most of it of a light brown, and but four or five inches in length.[1] On the 16th of January the matters that came away were very small in quantity, greenish in color, and of a very bad odor.

1 A considerable quantity of this hair was shown to the College.

Since that time there has been nothing of notice in the discharges from the bowels, except twice a slight quantity of blood. There is now no sign of the tumor.

These dermoid or piliferous tumors are interesting, surgically, from the obscurity they throw over diagnosis, and in the complications they occasion. In the case just related, the tumor was believed to be a uterine fibroid for several months; in fact, until it was observed to become quite soft, from hard, as it had always been before. In a pathological point of view their interest is very great indeed, and also in one of comparative physiology. By far the larger number of dermoid cysts—indeed, the immense majority of them—are ovarian; but no matter in what part of the body they may be found, or what may be the sex of the patient, the doctrine of "the continuous development of tissues out of one another," as Virchow calls it, will suffice to account for the growth of all ordinary dermoid or piliferous tumors. Inherent in the tissues of the body is a a peculiar formative and reproductive power, and it operates in the production of these strange tumors, as it does in the large number of multiform morbid growths which spring up everywhere under circumstances impossible for us to explain.

In ovarian morbid growths the kind of tumor that is formed depends upon the strength of the formative impulse. In ordinary cases, the force of formative power goes no further than the production of cyst-walls with a secreting endothelium which pours out fluid contents. In some cases the cell growth is enormous, and yet there is no disposition to organization, and piliferous excrescences, cancerous and colloid masses, show themselves. In others, again, imperfect attempts at organization are seen, as in those called dermoid or piliferous, on account of what is most usually found in them.

The origin of all those cysts is traced, indirectly by way of exclusion, and directly by way of observation, to the development of the ovisacs or Graaffian vesicles; and, when we consider what these ovisacs are, we need never be surprised at the contents of these cysts, and at the abundance, the nature, and the variety of these contents. When skin, hair, teeth, and so on, are met with, it is quite in accordance with known facts in comparative physiology to look upon tumors containing them as imperfect attempts at organization arising from the powerful germinative aptitude of the ovary. The formation of imperfect tissues is reached without ever going so far as the formation of an organ, let alone that of an organism. Such formations may be looked upon as examples of parthenogenesis, as imperfect vestiges in the higher animals of a regular physiological act in some of the lower ones.

[After the reading of the preceding paper:—]

Dr. Formad said: A few weeks ago I met with an ovarian cyst of quite unusual dimensions. The woman from whom the tumor was removed

was 35 years old, and had led an irregular life. The tumor was large, and suggestive of an ovarian cyst. On opening the abdomen, it was found attached by a very long pedicle to the left ovary, and directly starting from it. When removed, the tumor weighed fifteen and one-half pounds. It was incised, and twelve pounds of sebaceous material escaped. The autopsy was performed while the body was still warm. The sebaceous material at once congealed, and in the course of an hour presented the apperance of tallow. The cyst itself was multilocular, having five or six divisions. These loculi contained a number of long growing hairs, which sprang directly from the inner surface. There were also a number of cartilaginous and bony masses, but no direct formation of teeth was seen. Subsequently inquiring into the past history, I learned that the tumor had been growing from the time she was five years old. I mention this as an unusual case, and will some time exhibit the specimen.

Society Reports.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Meeting of Feb. 19th, 1885.

President Dr. McPheeters in the Chair.

Laceration of the Perineum—Complications.

Dr. Coles.—Mr. President, I have a case which is causing me a little anxiety at present, and suggests some interesting points for discussion. Yesterday two weeks ago I operated for laceration of the perineum upon a young woman who gave birth to a child when she was barely 14 years old, which resulted in a very severe laceration extending down to the sphincter, in fact I think a portion of the sphincter must have been ruptured; there was a very thin septum between the vagina and rectum. The operation went off very nicely and the patient did well; she had at no time any fever, never complaining of any pain and was in fine spirits. Her bowels, in the meanwhile, after the operation, were constipated. A good many authorities recommend that the bowels be kept constipated for two or three weeks. At first I kept this patient's bowels confined for 13 days by opiates, and then ordered the nurse to give her a large warm water injection and a table-spoonful of oil and to repeat it, if necessary, on the next day. Yesterday I was called to see her; she had had one pretty free evacuation. Her nurse had given her quite a number of injections. The girl seemed very pale and had an anxious expression of countenance; she had been vomiting persistently; there was a wash-bowl with a great deal of yellow material in it by the side of the bed; she seemed to be very nervous, was trembling, and had a haggard look. I

passed my finger in the bowel as far as I could reach and removed a few lumps of fecal matter. The lower bowel was not impacted with fecal masses, in fact there was little fecal matter within reach; all seemed to be soft and of a pultaceous consistency; there were a few lumps, but most of it was of proper consistency. I directed the nurse to lift her upon the chamber so that she might have more strength to move the bowels. She did so, but very little passed. I then concluded, as she seemed to be thoroughly used up, to give her a dose of chloral, which I hoped would quiet her nerves, and I thought if I could accomplish this perhaps the whole thing would blow over. The first dose of chloral was rejected, but two hours afterwards she was given a second, and she had a good refreshing sleep from it, but she woke up and vomited again. Then another large injection was given, but there was very little fecal material removed. To-day she is still vomiting and has had no evacuation of her bowels. I presume that the trouble must be in the nature of an obstruction which has grown out of the constipated condition, though, as I say, at the time she took the dose of oil she had not complained of the slightest nausea. She has had a good appetite, and has been constantly begging for something to eat. I had kept her on rather a spare diet, so that in every way she was apparently in a condition of perfect health. This morning I ordered her ten grains of calomel and five grains of bicarbonate of soda, which I hope has been retained and may produce a free movement of the bowels. I saw her this evening, and she had had a pretty good action. In regard to the management of the bowels after this operation I am rather inclined to think that where the operation does not involve the sphincter, it is better, perhaps, instead of cutting the sphincter as was recommended by the old authorities, to give the sphincter a good thorough stretching and let the bowels regulate themselves. I think that if I operate again, instead of giving opium for the purpose of constipating the bowels, I would stretch the sphincter thoroughly, and then leave the bowels either to take care of themselves, or else I would give some gentle aperient from time to time and keep them open. I think probably that the tendency has been to keep the bowels constipated too long, and believe it would be better if the bowels were not constipated, as it is necessary when they are constipated to forcibly eject large scybalous masses, which do as much or more towards tearing the sphincter and destroying the work done to the perineum than would be accomplished by a free, painless movement of the bowels every day.

Dr. Ford.—That is an interesting point, Mr. President, and I would ask Dr. Coles at what time he would stretch the spincter; before passing the sutures or afterwards?

Dr. Coles.—I would do it before, or, at least, before closing them.

Dr. Ford—Before vivifying the parts then?

Dr. Cŏles.—That would be a good time to do it; but perhaps it would be better after vivifying the parts, because the parts are in a more natural position before they are stretched and you could probably perform the operation with greater facility before stretching them.

Dr. Ford.—This strikes me as a very sagacious and interesting suggestion, and one I shall think over very carefully. It happens that I have under treatment a case now of that character which I operated upon last Saturday; and the day before I operated I gave a good dose of castor oil. In my opinion we ought always to do this, so as to get the bowels pretty empty. I always do this and avoid the use of opium by the mouth, or morphine by the rectum if I possibly can, but I certainly do aim to keep the bowels constipated for four days after the operation, then to allow them to take their course. Thomas thinks that tbe bowels should be kept constipated until the stitches are taken out, but he quotes Thompson as favoring a lax condition. This, I think, is a more intelligent view. It makes very little difference whether the bowels are kept lax or kept absolutely unmoved so far as the success of the operation is concerned; but when we consider that the stitches are applied, and the wall of the rectum brought forward and considerably stretched, and that the vaginal mucous membrane and uppermost wall of the rectum are stitched together, it is almost impossible that a movement of the bowels can take place if the feces are of any hardness without disturbing the parts operated upon. But if the motions drain away in consequence of a previous stretching of the sphincter, all disturbance is avoided, and the preliminary would not add materially to the gravity of the main operation. My own practice is, after the fourth or fifth day to administer an enema of warm water, avoid opium by the mouth or morphine by the bowel, as much as practicable; if the patient needs a laxative, give her sulphate of magnesia and sulphur, and follow that by an enema of warm water, and open the bowels gently in that way.

Dr. McPheeters.—Do you allude to the violent stretching of the parts?

Dr. Ford.—Yes, sir; and paralysis of the sphincter.

Dr. McPheeters.—It seems to me that this is a great deal better than allowing scybala to form; hard feces, when they come away must interfere with the integrity of the parts.

Dr. Boislinere.—I think the suggestion of Dr. Coles a very valuable one. A woman at the Sisters' Hospital has been operated upon in this manner. I am in favor of allowing a free action of the bowels. It is a very good success in this case.

Dr. Prewitt.—I think it better to let the bowels alone, that is to keep them, if anything, lax but not to allow them to become constipated. It is the constipated bowel which strains the stitches. There can be no such thing if the bowels are loose, for the reason that the liquid or semi-

liquid contents pass through the sphincter without any straining or stretching upon the anterior wall of the rectum.

Dr. Coles.—There will be more or less contraction.

Dr. Prewitt.—Yes, but I operated upon a case in which I gave the woman morphine every day and kept the bowel necessarily constipatad, and when it became necessary for it to be removed it was accomplished by a warm water enema; there was no special trouble resulting from it.

Dr. Boislinere.—The case leads us back to the discussion when Dr. Prewitt was going to express his view of the propriety of the immediate repair of the perineum. I would like to have the doctor express himself as to whether it should be repaired immediately after the rupture or whether we should wait.

Dr. Prewitt.—I had not intended to make any special point in the matter at the time, except to say that there might be a question as to what was the best thing to do under certain circumstances. Surgeons have never yet found a means of insuring the union of lacerated tissue. In fact we cannot always accomplish it in smooth wounds, although more frequently than in lacerated wounds. Now the point I referred to was this. In the ordinary operation we place the deep sutures in the perineum bringing together comparatively ragged surfaces; and it is not always possible to bring those parts so accurately together that there shall be no interspaces. There are little pockets in which there is some accumulation of fluid, and it is just in that condition of things where we have septic trouble set up. That is one of the great difficulties in amputations, in fact it is the argument in favor of the open wound treatment in amputations, for we thus secure thorough drainage. It is almost impossible to bring the flaps together in an amputation in a way that there shall not be some spaces where fluid may accumulate, and induce decomposition and septic changes with poisoning of the patient. Now it is just so, I think, in cases of laceration of the perineum. We are likely to have retention of fluid in these interspaces, and this fluid is liable to undergo decomposition. Consequently we are liable to have septic trouble set up; and especially if inflammation of the parts is set up and union does not take place, the stitches serve to retain the discharges and favor absorption. Now, Dr. Barret's suggestion was simply to bring together the mucous membrane, and this of course would to a great extent obviate the trouble, as in that way there would be thorough drainage; it would be practically the open wound treatment, and the risk to which I refer would be obviated. But I have seen one or two cases where there has been septic trouble set up. One patient I remember, came very near dying; she had a temperature of 106.5°, and I certainly think in that case there was a little suppuration due to the stitches. Now every precaution was taken so far as antiseptic treatment was concerned, carbolic acid washes were

used abundantly, but she came very near dying from septic trouble. Another case did die of pyemia where every precaution was taken that could be thought of, and I was really very much inclined to believe that it was due to the stitching up of the perineum; and that if I hadn't stitched the perineum there wouldn't have been the trouble or suppuration along the line of the rent and along the route of the stitches. Of course I have stitched others that did very well, where there was no trouble at all, and which united very promptly, as happens in the great majority of cases. But looking at those two cases at the time this matter came up it looked as if the stitching might have something to do with setting up the septic condition.

I also remember the case of a woman in her first labor, where there was a laceration of the perineum and a rent of the mucous membrane from the vagina upward, the mucous membrane, also, of the vaginal wall was torn nearly up to the cervix. I didn't sew that up, because I was apprehensive that unless I could stitch up the rent in the wall of the vagina thoroughly, in such a way as to prevent any possible accumulation of fluids along its track, I would be likely to have septic trouble following, and if necessary the perineum could be repaired by a secondary operation.

The lady had considerable fever on the third or fourth day, and I felt considerably uneasy. I felt that possibly I should have stitched up the perineum, but she got along very well, and really the lacerated perineum has improved immensely. I mean to argue simply that if we could foresee that the operation would not succeed, or if we could believe that probably in any case it would not succeed, as it does not succeed in every case, it would be eminently better not to do it, because in any case where it does not succeed I am certain that it is likely to add greatly to the dangers of septicæmia and pyemia and so on. If we adopt the suggestion of Dr. Barret and simply unite the mucous membranes and leave the balance to fill up of itself, of course I can not say anything against that, there would be no risk in that; on the contrary it would be a protective measure and allow free drainage of the parts.

Dr. Coles.—He would keep the patient's legs together, wouldn't he?

Dr. Prewitt.—I suppose so, but that would not necessarily prevent the drainage.

Dr. Boisliniere.—Don't you suppose the immediate operation has been done too often?

Dr. Prewitt. — I suppose it has frequently been done when it was not necessary. I have no doubt in a great many cases there is repair to a great extent by nature that would obviate need for any operation. In cases where there was a degree of laceration that was rather startling, I have seen repair take place to such an extent that it seemed to indicate that there was no need for operation.

Dr. Boisliniere.—I have seen such cases. I remember a remark of Dr. Hodgen on this subject of the reparative powers of nature. He said that in a great many cases it was unnecessary to take any measures for the repair of the perineum; that in a great many cases nature would perform almost a complete union, and in fact, there would be a very good perineum left. I have seen that constantly in my practice, and I suppose all of you have seen it. In a great many of these cases there is no necessity for operation. We will have a pretty good perineum without it, so that in my opinion the immediate operations are not necessary in all cases. Furthermore, I think that very frequently these immediate operations are followed by what we call a skin perineum simply; there is no deep union of the perineum, and unless nature has filled up intervening space by granulation, you will have simply a skin perineum. The operation looks very successful, but if you put your finger in the anus and vagina, you will find that there is no body to the perineum. I don't see many cases where I think operation is called for. There is always a danger of pockets forming which are apt to contain septic matter, and there is always danger when they are formed, you cannot get rid of the lochial discharge. I think, therefore, that immediate perineorrhaphy is seldom called for. I am surprised sometimes to see how frightful the perineum looks immediately after labor, yet how different if I wait a month. Even in some cases of complete rupture of the sphincter, nature by cicatricial tissue will provide a kind of secondary sphincter, and the woman will retain her feces by the aid of this secondary sphincter, and she will not be troubled with incontinence of feces at all, so that I rise simply to enter my protest against the immediate operation to repair the perineum in lacerations of all kinds after labor. I think nature will do wonders, left to herself, and you can never tell whether the operation will succeed or not. You expose the woman, by the formation of these pockets, to an additional danger of the production of septicæmia. I prefer to wait and see what nature will do for the patient.

In partial and unimportant lacerations the *serrefines* have been proposed — an instrument which catches these parts and brings them together — the idea was suggested by the Brazilians. There is in Brazil a very large ant, which has very long and strong mandibles. These ants having once taken hold, never let go. The natives apply these ants to the apposed margins of a wound, and after they have taken hold of the parts the native surgeons simply twist the head off, and the mandibles serve as a clamp. This is a living *serre-fines*, which is nothing in fact but a hint taken from the giant Brazilian ant; it is a very painful operation, however.

I should say that the immediate operation should be abandoned except in the very few cases where it is called for.

Dr. Prewitt.—In cases of laceration which extend through the sphincter, would you perform the immediate operation?

Dr. Boisliniere.—I would wait in such cases. I think we are bound to wait sometimes for three or four months, and operate if the sphincter is completely destroyed, but if the sphincter is simply *reached* by a considerable laceration we should operate immediately.

Dr. McPheeters.—Is not the argument in favor of these immediate operations that they are done for the purpose of preventing septicæmia?

Dr. Boisliniere.—Well, it doesn't prevent it always.

Dr. Ford.—That is one of the arguments for the performance of the immediate operation. There is but little trouble in performing it, as there is no necessity for scarifying or denuding the parts. After the operation the parts heal in six or eight days, and are completely repaired and in their normal position. There is a great deal of good sense in what Drs. Prewitt and Boisliniere have said, in my opinion, but I have often practiced the immediate operation, and always with apparent good results.

Dr. McPheeters.—In the few cases of lacerated perineum which I have had, I have usually waited for the late operation, and thus taken advantage of the repair which nature brings about, and have sometimes found that it was not necessary to operate at all. My last case, which occurred some five or eight weeks ago, was after an instrumental labor in which Dr. Ford assisted. The patient was a primipara, with a contracted pelvis. The child's head was large and could be delivered only by forceps. There was a laceration a little to the left of the median line, and this was the only instance in which I have resorted to the immediate operation. The delivery was effected at about twelve o'clock at night, and early the next morning I put in three or four stitches however, bringing together the mucous and submucous tissues. I used antiseptic washes and antiseptic dressing, and in that case the result was very satisfactory, there was no septicemia. I have confidence, like Dr. Hodgen, in the recuperative powers of nature, and I think oftentimes lacerations which look formidable at the time, are very completely repaired by nature without any operation.

Dr. Scott.—During the last six months I have been called four times to repair lacerations of the perineum of patients in the hands of midwives. At my end of town nearly two thirds of the cases are in the hands of midwives. I made the primary operation every time. I never wait; I never saw any necessity or reason for waiting. In these four cases occurring in the hands of midwives, and in one in my own practice during the last six weeks, I have made this operation, and I have had excellent results with the exception of one case. In this case there was a rupture not only of the perineum but also of the neck of the womb; in this case I propose after awhile making an Emmet's operation. That is the only case I have had in a long time in which I thought an Emmet's operation was justifiable,

but of course I will wait until the perineum is healed up before making this operation; in fact, I shall wait until she weans her child. In these other cases the result was most admirable and the recovery prompt. With one exception these cases were women with their first child in the hands of midwives. The last case in my own practice was a woman with her first child. I made a deep suture bringing the parts together as well as I possibly could, and there was a most beautiful result, the union of the perineum was most perfect. One of the worst cases of rupture of the perineum that I ever saw was in my own practice. I asked Dr. Hodgen to see the case with me next morning. He made the operation at once, and there was a very admirable result. In these cases the sphincter was not involved. I do not see why in these cases when we can so easily approximate the surfaces and hold them in position by sutures, we should not perform this operation and give the patient a chance of recovery. Even if the primary operation does not succeed, it will not prevent a secondary operation. It does not interfere at all with the patient's recovery, and does not render the danger of the secondary operation greater. The primary operation in my hands has been very successful, and I see no reason why I should not continue it.

Dr. Coles.—Dr. Scott has anticipated to a very great extent what I intended to say. I do not see the force in Dr. Boisliniere's statement, that a great many cases are operated upon in which there is no necessity for the operation. Every physician and man of experience ought to be able to judge to some extent at least whether the operation is necessary or not, and even supposing that the patient would recover without the operation it is a simple matter to put in two or three stitches and bring the parts together, and I do not think there is a great deal of risk in putting in these stitches. I think, with rare exceptions, we have no disagreeable results so far as pyemia or septicemia are concerned. Dr. Prewitt has mentioned two cases, but I have never seen a case. I have sewed up a number of lacerations and I have never seen any ill results. It has long been observed that where lacerations are only partial, and the patients are kept clean and the limbs approximated, a surprising degree of reparation will occur —often avoiding the necssity of an operation. That is a point we can all recognize and that is thoroughly established, but still it cannot be denied that a great many ruptures take place where the sphincter is not involved, which will not ultimately heal without some subsequent operation. It seems to me the chances are the patient will do well, and that the union will take place if the operation is done immediately, and I think it is well, as Dr. Scott has just said, to give the patient the benefit of it. Now, I suppose that really the explanation of the fact that these cases do so well where the perineum is sewed up immediately, is that the muscles have been thoroughly stretched by the birth of the child and remain weakened. Under such circumstances, especially if there is a pretty large head, the

muscles are very thoroughly stretched so that there is more or less paralysis, and therefore when the parts are brought together there is very little contraction of the parts which are involved; they remain paralyzed and passive, just in a condition favorable for union. The point raised by Dr. Prewitt in a theoretical point of view; there is danger of the lochial discharge flowing down and it is liable to get into the interspaces between the stitches, etc., and there is no doubt that in some cases it would be exceedingly dangerous. But notwithstanding the fact that it seems such a formidable objection theoretically, yet, as a matter of practical fact, we know that the vast majority of these cases get along well, and that patients very rarely contract septicemia from this cause. I remember a case in which I came near losing my patient from septicemia. It was a case in which there was an extensive laceration of the perineum, which was left alone for the reason that another physician who was present opposed the operation. He said he did not understand how the torn surfaces could unite, and the family found out that he was opposed to it, and they concluded that it was best to wait. Of course I did not oppose him, I merely said that if it were my case, and I had the whole control of it, I would give the patient the benefit of the operation. The patient had violent fever, and symptoms of septicemia, and at one time her life was almost despaired of. She did, however, manage to recover, but subsequent troubles came on, such as prolapsus and so on, and two years afterwards she was operated upon. I don't think her health has been as good since. I find that women are very liable, if not operated upon at once, to put off the operation until one or two children have been born, and uterine troubles are apt to come on, so I think that by all means we should perform the operation immediately.

Dr. Gehrung. — How soon after labor would you perform the operation?

Dr. Coles.—Immediately, before leaving the house.—*St. Louis Courier of Medicine.*

THE BRITISH GYNÆCOLOGICAL SOCIETY.

Wednesday, March 25.

DR. ALFRED MEADOWS, President, in the chair.

The minutes of previous meeting having been read by Dr. Heywood Smith (hon. sec.), and confirmed, were signed. The names of five gentlemen were then read as proposed for election, and will be balloted for at the next meeting.

SPECIMENS.

MR. LAWSON TAIT exhibited two specimens—one, a very large tumor removed a few days previously from a patient who had been under the care of a general physician for over two years. When examined ten

days ago the tumor projected partly into the vagina, and gave rise to considerable hæmorrhage. Owing to extreme exhaustion of patient, Mr. Tait decided not to operate without backed opinion, so called in Dr. Matthews Duncan, at whose instance general tonic treatment was adopted for a few days, and the operation then preformed. The wounds did very well, but the patient unfortunately sank and died from sheer exhaustion. The second case was one of fibroma removed from a patient who was at first thought to suffer from tubal pregnancy, as she was known to be pregnent, but upon further examination and watching, a fibroid with twisted pedicle was diagnosed, and that condition was upon operation found to exist.

Dr. Bantock considered Mr. Tait's cases thoroughly substantiated the remarks he had made at the previous meeting in favor of early operative interference.

Dr. Aveling inquired if special drainage were used in each case, and was at once answered in the affirmative.

Dr. Routh quoted two cases very similar to Mr. Tait's, in which, some years ago, he had attempted to remove the tumors piecemeal *per vaginam* with wire ècraseur, but only got away pieces, and in each case the patient died. He would like to know if Mr. Tait advocated abdominal section in all such cases.

Mr. Tait, in reply, said he would not have operated in the case without being backed by good practical opinion, but considering the satisfactory course taken by the wound, he certainly would in future take entire responsibility of the operation. He had operated on at least a dozen cases very large tumors partly projecting into vagina with the wire ècraseur, but all save one had died, and the one had a most narrow escape; he had therefore entirely discarded that method for such cases, and considered all cases where the tumors were considered too large for convenient removal *en masse per vaginam* should be removed by abdominal section, and the point he wished more specially to press was that the operation should not be put off until the patient was sinking from exhaustion.

PERFORATIONS OF THE BLADDER.

Mr. H. A. Reeves exhibited a specimen which he considered unique; it was a pathological perforation of the bladder without further adjoining disease. The woman, æt. 23, was admitted into the Soho Hospital for Women with excessively ammoniacal urine. Upon examination a urethral polypus was found and removed. The urethra was dilated, and bladder most cautiously examined. To the surprise of himself and colleagues, the sponge and holder passed easily a most unusual distance in, and the actual condition was not for certain made out. Symptoms of hæmorrhage set in, and the patient died. On post mortem examination the bladder was found to have ulcerated from within outwards; a slight omental adhesion existed round the rupture.

Dr. Barnes spoke of similar perforations of the bladder, but Mr. Reeves saying he alluded to cases only where no complications such as malignant disease of the small intestine existed, limited the discussion to that line.

Dr. Aveling quoted a case which he had tried to cure with galvano-cautery to edges, but patient left the hospital before he could do very much, and she had not been seen by him since.

Mr. Lawson Tait did not consider the case at all unique. Such ulcers had been described by himself and others, and had no doubt that if this case had been left for a time, to let the omental adhesion get stronger, the accidental perforation would not have occurred. In such a case as that brought forward the perforation would occur most easily, notwithstanding great caution in examination.

Dr. Burton, of Liverpool, per Dr. Edis, showed a case of bilateral abscess of ovaries in a patient who had been married ten years and had three children.

Dr. Bell, of Glasgow, then read an exhaustive paper on

CONGESTIVE DYSMENORRHŒA,

of which the following are the conclusions:

1. It may arise in conjunction with stenosis, but the stenosis cannot be the sole cause, or why does the pain cease when the flow has become thoroughly established? or why do some women suffer when others do not, the outlet being of equal calibre in the various cases? Or, again, why do some suffer at one time and not at another?

2. Dysmenorrhœa may accompany a neuralgic condition of the uterine walls, and frequently does so, for well we know that a neuralgic woman suffers most at the catamenia, not only in the pelvic organs but elsewhere, and it is quite natural that the activity of the uterus at that time will render it doubly liable to neuralgia then.

3. Dysmenorrhœa has been said to lead on to spasm of the uterus, and compared to the spasm which produces asthma, and by way of argument Dr. Matthew Duncan says: "Asthma is caused by a copious secretion of the mucous membrane, just as dysmenorrhœa is generally relieved when the menses flow freely." Now I hold that the very reverse is the case, for it is only when the spasm in asthma ceases somewhat that the mucous membrane is able to secrete mucus to any extent. When the spasm is severe, the nerve centres which control the mucous secretion by reflex action are paralyzed temporarily, and it is only when the irritating effect of the spasm subsides that they are able to act. When the modified irritation which remains stimulates them to free action a copious flow of mucus results, just as when a severe inflammation of Schneiderian membrane occurs, no mucus is secreted, but when this subsides the more intense irritant ceases to act so powerfully on the ganglionic centres when their activity is restored, and afterward stimulated by the degree of irrit-

ation which the less congested condition of the mucous membrane conveys through their different filaments. So that the relief in asthma when mucus is secreted is not *post hoc propter hoc*. Whereas, the relief obtained in dysmenorrhœa when the flow is established is *post hoc propter hoc*.

4. The obstruction theory has had many advocates amongst whom are numbered Dr. Barnes and the lamented Dr. Marion Sims, but, unwilling as I am to differ from these veterans in the science of gynecology, I must confess that I fail to see how fluid blood should be less able to escape without pain than the catarrhal discharge which is so copiously exuded in the intercatamenial period. Nor can I understand why the pain ceases after the menstrual flow has been thorough. But, gentlemen, I came here to give my views on this important subject, and not to criticize those of others, and I have expounded these as explicitly as the time at my disposal permits, with deference I leave them for your consideration.

DISCUSSION.

Mr. Reeves said his French friends considered the excessive use of enemata as practiced in that country, a great evil, as leading to atony of the rectum. He had several times found granular uretera connected with dysmenorrhœa.

Dr. Barnes objected to the treatment of stenosis by bougies, but had cured many by reasonably fair incisions. Declined to enter into any general and full criticism of the paper, as there were many new points proposed which must be thought over carefully and tested before much could be said to advantage.

Dr. Heywood Smith was surprised to find no mention had been made of leeches or scarifications in treatment of congestive dysmenorrhœa.

Dr. Chalmers rather disputed some of the pathological and physiological points, but on the whole approved of the paper.

Dr. Edis knew flexions often existed without inconvenience to patients, also that in young girls especially, in whom it was evidently undesirable to make avoidable examinations, many cases could be cured by general tonic treatment.

Dr. Aveling thought that an os which would give rise to the passage of a sound might be blocked by clots and debris, and so give rise to dysmenorrhœa.

Dr. Bantock opined that flexion often existed for a time unknown to the patient, and that it would very likely lead to eventual congestion; and the pain was due to the congestion, more than the flexion.

Dr. Bell, in reply, said his experience led him to value enemata conjoined with nux vomica as decidedly beneficial in many cases of dysmenorrhœa, and had seen no evil results, such as atony of rectum. He believed many cases usually treated by various forms of dilatation, could be equally well if not better treated by medicated tampons. With reference

to congestive dysmenorrhœa, with an apparently sufficient canal for the ordinary blood and debris of menstruation to pass, as evidenced by the ability to pass a sound easily, Dr. Bell is of the opinion that the congested membrane may overlap the edges of the internal os and act as a more or less shut valve, which, however, can be easily pressed open by dilators. This simple view seems to have been overlooked while searching for a deeper cause.—*Med. Press.*

OBSTETRICAL SOCIETY OF BOSTON.

Meeting of February 14th, 1885.

The President, Dr. A. D. Sinclair, in the Chair.

Dr. W. L. Richardson read the following communication on

Corrosive Sublimate Injections.

In 1883 Negri *Bull. Gen. de Therapeut.*, concluded an article on corrosive sublimate in puerperal antisepsis with the statement that a solution of one to 2,000 has sufficient antiseptic properties to combat puerperal septicæmia and can be substituted for a two per cent. solution of carbolic acid; that its toxic effects are almost *nil*, he having seen once only a case of mercurial erythema.

Although a solution of corrosive sublimate had been used for some time in Germany as an antiseptic injection, I had never used it at the Boston Lying-in Hospital until my last term of service. When I came on duty in the spring of 1884 I continued its use, which had been begun in the winter by my colleague, Dr. W. E. Boardman. Very few cases, however, required an intra-uterine injection, and I therefore had few opportunities to observe its effects. For nearly eight months the hospital has been free from septic cases, but during December there have been three cases which occasioned some anxiety, one of them being a well-marked case of puerperal septicæmia, and the other two presenting suspicious symptoms of septic poisoning, but in a much milder degree. These cases seemed to me to deserve mentioning as showing my experience with the use of corrosive sublimate as an entiseptic.

Case I. M. A., Swede, multipara, 23 years of age, entered the Hospital November 9th. The child had been born on the train while coming from Gloucester. She entered the hospital at eight o'clock in the morning. The placenta came away in half an hour after her entrance. November 9th, the evening temperature being 100° F., and the lochia somewhat offensive, an intra-uterine injection (corrosive sublimate one to 2,500) was given and repeated the next day. November 12th, the intra-uterine injection was repeated, and, as the patient had bilious vomiting during the day and no dejection since her entrance, calomel (five grains) and jalap (six grains) were ordered. November 14th, the gums were very tender and bled easily. There was a grayish deposit on the inside

of the under lip and great pain on chewing. Astringent washes were ordered. The symptoms improved gradually, aud she was discharged, December 1st, well. At the time I considered the salivation due to the calomel.

Case II. C. M., 22 years of age, entered the hospital December 1st; the child was born at six o'clock the following morning. Up to December 9th there were given, morning and night, vaginal douches of corrosive sublimate (one to 2,000), and, as the temperature was high and the lochia offensive, also three intra-uterines of the same. Upon December 8th the two left lower incisors were loose and the gum beneath them red and tender. Astringent washes were ordered. Dec. 9th, carbolic acid two per cent. was substituted for the corrosive, and the symptoms disappeared in two days.

Case III, M. M., 26 years old, entered the hospital December 2nd at 8 p. m. The child was born early the following morning. The patient received from the time of her entrance two vaginal injections daily of corrosive sublimate (one to 2,000), and, owing to the high temperature and offensive lochia, two intra-uterines of the same. December 5th. Complained of soreness of gums. December 6th. Complained of soreness of tongue. No especial attention was called to it until December 11th, when the upper and lower gums were reddened, especially near the teeth, and tender. No tenderness on closing the teeth sharply together. The lower lip was reddened on the inside, and there were to be seen small patches of gray exudation. The odor of the breath was characteristic. The tongue was very sore and red on the left edge and beneath, where there were also several patches of thick gray membrane. The patient several times noticed an excess of saliva. On the morning of December 9th a change was made to carbolic acid (two per cent.) for douches and intra uterines. The symptoms began at once to improve, and she was discharged, well.

Two other cases in which vaginal injections of corrosive sublimate (one to 2,200) had been given twice daily, presenting marked symptoms of incipient salivation, I substituted carbolic acid for corrosive sublimate during the remainder of my term of service, and shall never again return to the mercurial injection unless I change my present opinion of its danger.

Since writing the above I have heard of several similar cases occurring in private practice, and a physician in charge of the maternity wards of a large hospital has informed me of seven cases of salivation occurring in that hospital from the use of these injections: the strength of the injections in these cases was one to 2,500. Since that experience the strength of the injection was changed to one to 12,000, and no further trouble has been observed, although the injection has seemed to be sufficiently antiseptic in its character.

Dr. Ingalls said that if, for instance, one grain of corrosive sublimate should be dissolved in two thousand drachms of water, and one quart of this administered by injection, the rather large proportion of the mercury, namely, one-eighth of a grain, would cover the surface and be likely to produce mischief; if, however, one drachm of the one to 2,000 solution should be added to a quart of water one might feel sure of its being strong enough for his purpose and be unlikely to cause salivation.

Dr. Baker said that during the past year the one in 2,000 solution had been used at the Free Hospital for Women, both for irrigating denuded surfaces during operations and for washing out the uterine cavity; he had observed no bad results.

Dr. Davenport said he had used the intra-uterine sublimate injection in only one case, that of a sloughing fibroid; there was no salivation; but the patient complained of soreness and irritation about the vulva, and carbolic acid was therefore substituted for the bichloride. He was surprised that vaginal irrigation with the sublimate solution should be followed by salivation, as in two cases reported by Dr. Richardson, as the vagina does not readily absorb unless it is the seat of marked abrasions or lacerations: he had read, however, of diarrhœa following the sublimate douche in puerperal cases.

Dr. Richardson said, in reply to questions, that he had no knowledge that a one in 2,000 solution of the bichloride would destroy germs; in using the drug in that degree of dilution, he had relied upon the authority of others: from his clinical experience, however, he could say that a one in 2,000 solution destroyed the bad odor of fetid lochia and that its use was followed by a fall in temperature, when the elevation of temperature was attributable to septic absorption.

Dr. O. W. Doe reported a case of

POLYGALACTIA.

Dr. Richardson said he had seen three or four cases of polygalactia in hospital practice, and had had one case in private practice which very much resembled the one reported by Dr. Doe. The plan of treatment which he adopted consisted in weaning the baby, strapping the breasts, and administering fluid extract of ergot in half-drachm doses every three hours. He had been led to employ ergot in these cases from the observation of both Dr. Sinclair and himself in the Lying-in Hospital, that when ergot was given for several days after labor for the purpose of promoting the involution of the uterus or stopping afterpains the drug was very likely to arrest or retard the secretion of milk. In cases of hypersecretion he had found marked relief to follow the use of ergot as he had stated.

Dr. Chadwick favored strapping the breasts in these cases immediately after labor. He suggested that it might be advantageous to strap for seve-

ral weeks before labor in the case of a patient who in previous labors had suffered with polygalactia.

Dr. Draper said that the use of ergot in these cases was based on a sound physiological principle, namely, the well known action of the drug on unstriped muscular fibre; strapping was merely a mechanical means of accomplishing the same result. Certainly the combined use of the two agents was eminently rational.

Dr. Reynolds raised the question whether, if for any reason the mother is not to nurse her child, it is better that she should not nurse at all, or whether for the supposed effect of the lactation on the involution of the uterus she should nurse for a few weeks. For his own part he doubted whether it was justifiable for such a purpose to subject a feeble patient to the strain of lactation.

Dr. Baker said that so far as his observation went lactation unquestionably promoted the involution of the uterus. He therefore believed that the mother should be encouraged to nurse during the period of involution.

Dr. Richardson remarked that a woman was far more likely to preserve the original contour of the breast if she nursed for a week or two. The breast usually became lax and flabby when the woman did not nurse at all.

The Treatment of Threatened Mastitis.

Dr. Doe said he had good results from the use of belladonna ointment in ordinary cases of indurated breasts.

Dr. Richardson said his treatment of such cases consisted in the free use of saline laxatives, proper support of the breast, and inunction with camphorated oil. He had formerly used belladonna ointment with good results, but he had equally good results with camphorated oil, and since he had instituted, at the Lying-in Hospital, the practice of carefully rubbing the breasts with this agent, he had seen only five or six cases of broken breasts, and these occurred in phthisical patients. He did not believe there was virtue in belladonna ointment other that that of any emollient.

Dr. Sinclair said he relied almost entirely on taking away the child and strapping the breasts. He believed the late Professor Buckingham had first advocated this treatment.

Dr. Reynolds remarked that Hardy and McClintock taught that the breasts should not be used; but with threatening mastitis one does not want to give up nursing. Professor Buckingham believed that nursing on a cracked nipple was a common cause of mastitis. He thought the danger might often be averted by the use of a suitable nipple shield.

Dr. Green said he had seen great benefit result from covering indurated breasts with thin sheet rubber, such as dentists use for a dam in filling teeth. The rubber retains the heat and moisture and therefore acts as a light poultice. From the combined effect of rubbing with camphorated oil

and covering with the sheet rubber he had seen indurated breasts soften and their tension diminish by the spontaneous flow of milk. In such cases he did not advise giving up nursing unless the nipple was badly cracked.

Dr. S. L. Abbott reported a case of

Uterine Carcinoma of Unusually Rapid Development.

The patient was a married lady upward of forty years old, mother of five livng children, resident of a western city. In the spring of 1884 she returned home after a visit to her native state, Rhode Island, much worn and reduced in flesh from attending her mother in her last illness. Having recruited somewhat, about the middle of May she thought she had a miscarriage at an early period. She also had an early miscarriage while on a journey during the autumn of 1883. Two weeks after the occurrence in May she had a chill which was followed by discomfort in the uterine region. Her physician found, on examination, the uterus low down in the pelvis, pressing on the rectum, the cervix being somewhat shortened and bent forward. The whole organ was very hard and increased from fifty to seventy-five per cent above its natural size. The posterior surface was somewhat uneven. The organ was moveable in all directions, but not freely, as if held by adhesions, although no inflammatory deposit about it could be detected. There was no swelling above the pubes. The uterus was somewhat tender and the speculum showed moderate cervicitis. The condition of the organ was regarded as due to uterine engorgement, and considerable relief was obtained from rest, with hot douches and counter irritation above the pubes. During July the patient was well enough to visit a Western health resort, where she lost ground, however, and became very feeble, with considerable emaciation, accompanied by gastric symptoms and colicky pains in the pelvic region. In this condition she left home on August 20 for a visit to Mt. Desert, in the hope of improvement from the sea air. The catamenia had been regular up to that time, and came on soon after she reached Mt. Desert, being somewhat profuse and prolonged in period. During the rest of her stay she rode daily in an open wagon from three to five hours. She was treated during that time for her gastric symptoms, — gastralgia, vomiting, with diarrhœa, which were ascribed to hepatic disturbance, — with considerable relief. By the patient's desire there was no uterine treatment. She arrived in Boston in the last week of September, having come through by rail, a journey of fifteen hours in one day. She was very much exhausted, was extremely emaciated, and in walking was much bent over on account of the uterine discomfort when upright. For weeks she had not had a good night's rest, having taken no anodyne, and having at Mt. Desert suffered extremely from uterine pain at night. Suppositories of a small quantity of morphia in the rectum at once gave her great relief.

On vaginal examination the uterus was found very low in the pelvis, the os being just within the vulva, the neck being very much shortened

and flattened, so much so as to project very little above the uterine mass, from an inch to an inch and a half wide; the os was patulous. There was no hemorrhage or other discharge from it. The body of the uterus was so large as to be completely impacted in the pelvis, the surface in front and on the sides being perfectly smooth. From the posterior wall there was a projection backward from half an inch to an inch in height, an inch or more wide, which extended upward as far as the finger could reach, and was very tender to the touch. The whole of the body of the uterus was of a stony hardness, but not specially tender except on the posterior surface. The posterior cul-de-sac was not more than two inches above the vulva. The abdomen was perfectly flat and nothing abnormal could be detected in the abdominal viscera or by deep pressure above the pubes. The functions of the bladder were not disturbed, but the rectum was very sensitive to the pressure of fæces, apparently from the pressure on the enlarged womb.

The patient's appetite was poor and taste capricious. Evacuations from the bowels were frequent of small scybalous masses. By rest, soothing and anodyne remedies much relief from the local discomfort was obtained, the appetite improved and the evacuations became nearly normal.

Ten days after the arrival of the patient in Boston the catamenia were due, and were anxiously expected in the hope of still further relief.

As the case had been described in the letters which Dr. Abbott had received as one of congestion of the womb, he was not prepared for the deplorable condition of things which he found, and after a few more examinations he could not resist the conviction that he was dealing with a much more serious malady; in fact, uterine carcinoma.

At the expected time there was a menstrual molimen, as shown by a sense of fullness and pressure, but there was no catamenial flow. There was great increase of local discomfort and general disturbance of the system. In a day or two great tympanites appeared, the abdomen being distended to the utmost, and resonant throughout. During the rest of her stay in Boston this condition continued with very little relief, causing very great discomfort but very little pain. The patient left for her home on October 8th, arriving, after a continuous journey of two nights and a day in the cars, in a better condition than could have been expected. Her medical attendant was at once struck by the great change in her condition and appearance since he had last seen her in the latter part of August, and on consultation with a distinguished specialist was entirely satisfied that the case was one of carcinoma, not remediable by any surgical operation.

At this time the abdominal distension continued with marked evidence of the presence of fluid.

From this time the patient gradually lost ground, the appetite failed, and there was much nausea and vomiting, but little pain. She died

quietly November 13th. There had been no hemorrhage or discharge of any kind after the catamenia ceased.

An autopsy was made seventeen hours after death. The abdominal cavity contained ten quarts of foul serum. Of the omentum majus only small fragments remained, attached to the stomach and transverse colon. The intestines were of a deep purplish copper color, the external surface being studded throughout with nodules of cancer. The pyloric orifice of the stomach, the head of the pancreas and duodenum were united in a cancerous mass. The inner surface of the pyloric orifice was much thickened and corrugated, and only a small portion of the membrane of the stomach presented a normal appearance. Nothing abnormal was observed in the spleen, liver or kidneys. The pelvis was filled with a mass of cancerous disease, the uterus and its appendages being firmly united to each other. The leading features of this case may be summarized as follows:

Supposed miscarriage in the middle of May, followed in two weeks by a chill. At this time some enlargement of the posterior wall of the uterus and unusual hardness of the whole organ were detected. Gradual failure, with marked gastric symptoms and uterine pain. Catamenia regular, their last appearance being early in September. In the last week of September uterus was found to be impacted in the pelvis from carcinoma developed in its walls, without any evidence that could be detected of similar disease in the abdominal cavity. Rapid development of abdominal symptoms from the time of catamenial failure early in October, with peritonitis and extensive deposit of cancerous disease in the abdominal organs.

Mr. J. R. Chadwick reported a case of

RUPTURE OF THE VAGINA DURING COITUS.

Rupture of the vagina by the male organ is of so rare occurrence that its possibility has been denied by some writers of authority, hence I wish to put the following case on record.

Mrs. P. L., a woman of ordinary size and well developed in every way, applied at my dispensary on December 17, 1884; with the following story: She was 48 years of age, had begun to menstruate at the age of fifteen years, and had ceased at 38 years. She had been six years married to a sailor, with whom she had cohabited freely without difficulty or pain. She had never been pregnant. On December 14th her husband had returned from four months' absence at sea, and had had connection. The act was accomplished with difficulty. When it was effected she experienced a most intense lancinating pain on the right side internally. A profuse hemorrhage from the vagina ensued, which, however, ceased before morning. A purulent discharge set in on the second day, and on the third she consulted me. On examination I found that senile atrophy had taken place, as is usual after the menopause, so that the vagina was

much shorter and smaller in calibre than is normal in the adult. On the right side was a fresh longitudinal rent, an inch in length, located in the upper third of the canal, and opening into the cellular tissue to the depth of half an inch.

If the woman's statements are truthful, as I believe, this laceration may be accepted as fully explaining the pain which she felt in coitus and the hemorrhage immediately succeeding. The accident must be attributed to the fact that the senile atrophy had advanced with exceptional rapidity in the period of four months' abstinence during the husband's voyage and to his undue vigor from the same cause.

Two cases of this lesion are reported by Dr Zeiss, of Erfurt, in the *Centralblatt für Gynäkologie* for Feb. 21, 1885. In the first case the rupture was merely an unusually deep tear of the hymen in a virgin on the first night of marriage, giving rise to a hemorrhage so profuse as to have endangered life. This occurrence is not unusual.

The second case was in a woman who had had a child three years before, and a second one six weeks previously. Coitus took place *à la vache*, with exceptional vigor on the part of the husband, during which the woman experieneed sudden extreme pain in the lower part of the abdomen on the right side; persistent hemorrhage ensued. The external genitals were found to be sound, with no signs of contusion. The uterus was greatly retroflexed. The dimensions of the vagina seemed normal. The cervix was firmly adherent to the right side of the pelvis. In the right vault of the vagina was seen a fresh rent an inch in length, into which the finger passed some distance.

NEW YORK ACADEMY OF MEDICINE.

Meeting of Mareh 26, 1885.

ALEXANDER S. HUNTER, M.D., CHAIRMAN.

Dr. Malcolm McLean read a paper entitled,

THE MANAGEMENT OF PLACENTA PRÆVIA—AN IMPROVED METHOD BY WHICH TO COMPLETE THE FIRST STAGE OF LABOR IN SUCH CASES,

And exhibited some instruments, modifications of mechanical appliances already known, but which so simplified their application that the completion of the first stage of labor may be more promptly, easily, and safely accomplished by their use than by any other means at our command. The author regarded the views given by various authorities concerning the treatment of this complication as quite confusing; and the object of his paper was to suggest a line of treatment which was applicable to the great proportion of cases, and which gave the best chances for both mother and child.

The prominent feature of this grave complication of labor was the occurrence of hemorrhage, and all efforts must be directed towards its prevention.

The reader of the paper then mentioned the varieties of implantation, such as partial and complete, and also the conditions which present themselves in different cases, such as marked differences in the conditions of the tissues, notably the firm condition of the tissues in the primiparæ and the soft condition of the same in the multiparæ.

Of the various plans of treatment which had been recommended for the management of this inevitable hemorrhage, Dr. McLean only referred to those which deserved particular attention. First, the application of chemical styptics to the bleeding os; second, tamponing the vagina; third, the use of the vaginal tampon for completing the first stage of labor; fourth, rupture of the membranes and allowing the fœtal mass to press upon the bleeding surface; fifth, rupture of the membranes with rapid delivery; sixth, bimanual version, bringing down the feet; seventh, separation of the placenta, and either leaving the case to nature or delivery by version; eighth, plugging the vagina with Barnes' dilating rubber bags.

Dr. McLean thought the day had passed when chemical styptics, such as vinegar, alum, salts of iron, etc., should be applied to the bleeding os for the purpose of arresting hemorrhage. Posture and absolute rest should take the place of these local applications.

The vaginal tampon acted mechanically, and was the most valuable means we had. It was particularly valuable when the blood came from a firm cervix, and there was no indication for hastening the process of delivery. For such a tampon, there was nothing so good as carbolized wet cotton rolled into small balls, packed about the cervix, and filling the vagina full by the aid of a Sims speculum; the tamponing must be thoroughly done to be effective.

Tamponing the vagina and leaving it to be pushed out in front of the presenting part, according to Wiegand, was a plan of treatment which had been spoken favorably of by Hodge and others, and Dr. McLean wished to lay special emphasis on the advantage which this method possessed in primiparous cases. As serviceable as the method was, any condition demanding immediate interference called for some other method.

To the fourth plan, namely, rupture of the membranes and allowing the fœtal mass to press upon the bleeding parts, Dr. McLean offered some theoretical objections.

The method by rupture of the membranes and *accouchement force* he regarded as dangerous to both mother and child, and he could scarcely conceive of a case where such a procedure would be justifiable.

With reference to completing the separation of the placenta according to Simpson's method, he thought that, if cases occurred in which it

seemed to be the most desirable way of management, the method should be confined to those in which there was a dead child or faulty pelvis.

In regard to Dr. Barnes' method and the use of the dilating bags, it was a most valuable method, and the dilators were one of the most valuable aids in the practice of our art. In cases in which the separation of the placenta had partially taken place, these dilators were invaluable.

Dr. McLean then exhibited a modification of the rubber bag, which consisted in a duplication of the bag and tube so that one side may be distended independently of the other, and required but one insertion; besides, the bag had no extra pocket on the outside. There need be only two sizes used, and he always used carbolized hot water for filling them. The bag was introduced by doubling it upon itself, seizing it with the curved jaws of a forceps which was devised especially for this purpose.

The conclusions to which the author of the paper arrived were substantially as follows:

1. In any case of placenta prævia avoid the application of chemical styptics.

2. Inasmuch as the dangers from hemorrhage were greater than all else, preparations to induce premature labor should be made.

3. In primiparous cases with rigid tissues, the vagina should be well distended with the colpeurynter or tampon until cervical dilatation had taken place.

4. It was safer to rely upon thorough continuous pressure by Barnes' dilator than upon pressure by the fœtal parts.

5. Where the placenta was lateral or partial, and there was no indication for hastening the labor, the method of Braxton Hicks might be practised, consisting of turning by the bimanual method as soon as possible, pulling down a leg and with it and the breech of the child tamponing the ruptured placental vessels, and then letting the delivery be completed spontaneously, or aided by gentle traction.

6. When the head presented and the os was dilated, or very dilatable, rupture the membranes.

7. Podalic version was to be preferred to the application of forceps within the cervix, especially when the cervix was dry.

8. Complete vaginal tamponing might be applied and left in position in cases in which other means were not at hand.

9. The dangers of septic infection with the proper use of tampons and dilators was so slight that it need not be considered.

10. Wherever possible, delivery should be accomplished deliberately.

11. The greatest care must be exercised not to convey infectious material to the mother's system, which involved the application of the great principle of absolute cleanliness.

The discussion was opened by Dr. W. T. Lusk, who said the points in the paper were so fully in accord with his own belief, and had been made with so much, judgment, that he had nothing to add by the way of criticism. He was much pleased with the double dilator and also the instrument devised by Dr. McLean. For some time he had been in the habit of using an ordinary pair of cotton forceps for the introduction of the dilating bags, but the instrument exhibited seemed to possess special advantages.

Notwithstanding his substantial indorsement of the views offered by the reader of the paper, he wished to say a few words with reference to the Braxton Hicks method advocated so strongly by Lomer. From statistics it appeared that in ninety-three cases in which this method had been adopted, there was only a single death—a result which certainly was extraordinary, and so extraordinary that it was worthy of most careful consideration.

Soon after looking over these statistics, Dr. Lusk was called to a case of placenta prævia occurring in the practice of Dr. Spaulding, of Harlem, and a day was finally appointed for beginning premature labor. On account of delay, over which the consultation had no control, the day for inducing premature labor was postponed, and when finally the day was reached on which it was to be begun, he was summoned before the hour appointed, and on arrival found that labor had begun spontaneously, and that the os externum was nearly completely dilated, with the internal os dilated to about the size of a silver half-dollar. Dr. Lusk at once prepared the patient, introduced his hand into the vagina, passed two fingers through the cervix, ruptured the membranes, pulled down an extremity, and version was completed, the whole operation probably occupying not more than two or three minutes. Then the breech was brought down into the cervix. Thus far, the dangers to the mother are almost nothing, and now the question arises concerning the life of the child, can it be saved? Although, of course, this is a secondary consideration, it is desirable to do so, if possible. In order to prevent hemorrhage, he found that it was necessary to make slight traction upon the breech, just sufficient to retain the child in contact with the surface from which hemorrhage might take place, and in a very short time the child was delivered alive. The patient was a multipara, which favored the accomplishment of labor with a living child, and the manipulations were practised with comparative ease; doubtless if the patient had been a primipara the difficulties would have been much greater than they were, but the method was eminently satisfactory.

The patient did well until two or three days later, when she died somewhat suddenly from pulmonary embolism, probably due to delay in the induction of premature labor. So far as checking the hemorrhage was concerned, he could not speak of the method in too high terms of com-

mendation. The method of treatment, therefore, of placenta prævia, which he felt disposed to recommend, was to tampon the vagina if dilatation of the cervix has just begun, and as soon as possible introduce a Barnes' dilator into the cervix, and when the cervix is sufficiently dilated to render the extraction of the child a matter of no great danger, proceed to follow it up by the method of Braxton Hicks. He should hesitate very much before adopting the method by rupture of the membranes and trusting to uterine contractions to bring the head.

Dr. Isaac E. Taylor thought that a distinction should be made, in the treatment of placenta prævia, between the cases of placenta centralis and cases of placenta lateralis, or partial prævia. The treatment of partial separation of the placenta is so simple that it required but little consideration.

With regard to placenta centralis early delivery should be effected, for the patient's life was in great jeopardy. This was to be accomplished by dilatation of the neck of the womb and resorting to version, and version could be best accomplished by the bimanual method, that is, by the aid of external manipulations. The dilatation of the cervix might be accomplished by different means. When Barnes' dilators were used, or a vaginal tampon, dilatation or separation of the placenta did not take place at the internal os, but it excited contractions, and the placenta was partially separated when the the os was dilated to the size of a two shilling piece. Nature had then done her work, and the case became one in which only partial separation was to be accomplished.

Out of fourteen cases of placenta centralis which had been under his care, only five deaths had occurred. In most of the cases of placenta centralis the children were lost, but that was a matter of but little moment as compared to the saving of the life of the mother.

Dr. Taylor remarked specially with reference to the situation of the placenta in placenta centralis, and said that he had established by ocular demonstration the fact that the placenta was not attached to any part of the cervical canal.

Dr. W. M. Polk said that after the concise paper by Dr. McLean, and the remarks made by Drs. Lusk and Taylor, there remained but very little which need be said upon the subject. He thought the point brought out by Dr. Taylor, namely, that of making a distinction between placenta centralis and partial attachment of the placenta, was an important and practical one, as there was a great difference in the management of these two classes of cases. The fact of the placenta being central added very much to the danger, both with reference to the mother and the child.

As far as the general management of these cases was concerned, it was practically that adopted by Dr. Taylor, and Dr. Polk believed that the vaginal tampon was the safest remedy which could be employed. The points

suggested by Dr. McLean, that the ablest obstetrician would often find difficulty in introducing Barnes' dilators, was one which most obstetricians were willing at once to grant, and therefore any device which would facilitate the introduction of the dilating bags would be very acceptable. But it seemed to him that the wisest plan to be adopted was the simplest and safest plan for meeting the hemorrhage, and the tampon was probably the best way by which it could be arrested. He would suggest the modification of the tampon by the use of the roller bandage would not fulfil the indications at all. He did not pretend to say that it had not done so in Dr. Taylor's skillful hands, but it must also be said there were but few who were equally skilled in obstetric manipulations. Dr. Polk recommended thorough tamponing of the vagina, and by balls of cotton tied together kite-tail fashion to facilitate removal, as the best and most effectual method, and also introduced by the aid of Sims' speculum.

With regard to after-treatment, if the method of management advocated by Lomer was adopted, and the child was ignored, the management of these cases was comparatively simple, and certainly the introduction of the hand into the vagina and through the nearly completely dilated cervix gave the accoucheur thorough control of the situation. With perforated membranes, version according to Braxton Hicks' method could be readily performed; then bringing down one leg, allowing the other leg and body to remain in the cavity of the uterus, such pressure was exerted on the lower segment of the uterus as would completely control hemorrhage.

One would think that the child need not suffer materially in these cases, because the hemorrhage is arrested, and the extraction can be accomplished quite readily; but the statistics referred to by Dr. Lusk prove conclusively that the mortality to the child is very great.

The use of Barnes' dilator was unquestionably a measure of very great value in the milder cases, where the placenta is attached to the borders of the os, or a small portion overlaps the cervix, so that the hemorrhage will not probably last long. But where we have to deal with central implantation, Dr. Polk preferred to commence and continue with the tampon until the cervix was certainly dilated sufficiently to permit version.

Dr. Polk also sustained Dr. Taylor's opinion, that the placenta is not attached to any part within the cervical canal, and referred to museum specimens which illustrated that point.

Dr. E. L. Partridge referred to some of the clinical features of placenta prævia, of which he had seen quite a large number of cases, and in quite a proportion of them the placenta was centralis. He wished to commend the rubber bags in the management of placenta prævia of both forms, and he also spoke against the use of the tampons, especially with reference to the liability of conveying septic material to the mother, for in

very many instances at least the material of which they were composed was such as rendered the liability of the induction of septic infection very great.

He endorsed the view that the little pocket on the side of Barnes' dilator must be abandoned, and regarded Dr. McLean's instrument as a most excellent device for the introduction of the bags. With reference to the liability of hemorrhage to occur during the change of the ordinary Barnes dilators, the point that had been referred to by Dr. McLean, he believed that it did not constitute a serious objection to the use of Barnes' dilators, for he had used them in four cases of placenta prævia, and no hemorrhage had occurred in either of them during the period of the withdrawal of one bag and the insertion of another. The rubber bag goes directly to the source of hemorrhage, and was the most effectual means at our command for controlling this hemorrhage, as had been brought out by the author of the paper, and this pressure should be continued until the cervix was dilated. According to his experience the further obstetric procedure had been by version, as recommended by the very large majority of obstetricians, and complete version — not the method advocated by Braxton Hicks. Dr. Partridge did not regard placenta prævia under ordinary circumstances as a serious complication of labor.

Dr. R. A. Murray was fully in accord with the remarks which had already been made, and would simply refer to the importance of distinguishing between lateral and central implantation, as the management of the two classes of cases was entirely different.

With regard to Barnes dilators he had used two, side by side; sometimes three, of the smaller size, when the larger ones were not at hand, and really had obtained the results mentioned by Dr. McLean. Dr. Murray, however, regarded the instrument and the dilators exhibited by Dr. McLean as a very great improvement on the instrument and dilators which he had ordinarily used.

Dr. P. F. Mundé said he had nothing to add in the way of criticism on the excellent paper of the evening. He had seen twelve cases of placenta prævia, four of which were centralis, and the others partial prævia. Of these twelve women only two died, and four children were born dead.

Dr. Mundé regarded the three cardinal points in the management of placenta prævia to be as follows: first, to arrest hemorrhage; second, dilatation of the cervical canal and also of the soft parts sufficiently to allow easy manipulation, and then, third, rupture of the membranes and speedy extraction of the child, as rapidly as possibly consistent with safety to the soft parts. He had usually employed the colpeurynter to accomplish dilatation, but any instrument which distended the upper part of the vagina was sufficient. If the cervical canal was dilated to the size of a silver half dollar he thought that dilatation could be completed immediatel y

and delivery of the child accomplished at once, better than to turn and block the passages with the child, leaving nature to take care of the case. Although the life of the child was of secondary consideration, yet he thought that complete version and rapid delivery, as indicated, was equally safe for the mother, and that it would increase the chance of saving the life of the child.

Dr. W. E. Forest thought it important to first establish labor pains, and for this purpose the use of the colpeurynter or vaginal tampon was better than the use of Barnes' dilators, for the cervical canal might be thoroughly dilated and yet no uterine contractions take place, and under such circumstances the condition of things was very unpleasant, not to say dangerous.

His plan of tamponing the vagina was by means of cotton balls soaked with soapsuds, which rendered it unnecessary to use a speculum, and he believed that the vaginal canal could be thoroughly tamponed in this way. This tamponing was followed by pains which dilated the cervical canal, and when dilatation was sufficient the child could be easily turned by bringing down a foot, and the labor went on because the pains had already been established before the version was practiced. If, however, the os was dilated rapidly, as by means of Barnes' dilators, there was no natural condition present for the subsequent process of labor.

Dr. McLean, in closing the discussion, said that if there was one thing which Barnes' dilators accomplished it was to produce uterine contractions quicker than could be done by any other method, and it was because of this that he urged their use. The colpeurynter would excite contractions, but not so quickly, and besides it was not known, when the vagina was distended with the colpeurynter, exactly how much dilatation of the cervical canal had been secured until the colpeurynter was removed, and then a rush of blood might come, which did not follow dilatation with the rubber bag.

The Section then adjourned.

NEW YORK COUNTY MEDICAL ASSOCIATION.

Stated Meeting, April 20, 1885.

Incontinence of Urine in Children.

Dr. J. Lewis Smith read a paper on this subject, the first portion of which was devoted to a consideration of the anatomy and physiology of the bladder, especially as regards its muscular coat and nerve-supply. The enuresis, which was more common among males than females, might be both diurnal and nocturnal, but was more frequently nocturnal. He mentioned eight causes, two of which might sometimes be present in the same case.

1. Too great acidity of the urine, causing undue contraction of the bladder.

2. Increased quantity of urine.

3. The presence of stone in the bladder, in which case the incontinence is both diurnal and nocturnal.

4. Abnormal contractile power of the muscular coat of the bladder. The importance of this cause is shown by the fact that belladonna, which controls muscular irritability, is useful in such a large number of cases of enuresis.

5. Weakness of the muscular fibres constituting the sphincter of the bladder. This is rare in children in good health, and Dr. Smith gave an account of one case in which it was associated with spina bifida.

6. Reflex action through the agency of the nerves supplying other organs in addition to the bladder. In this class are the cases due to structural disease of the spine, ascarides in the rectum, phimosis, preputial adhesions, etc.

7. The dreaming of the child that it is in a convenient place for urinating. To this psychical cause attention has been directed by Dr. Roberts Bartholow.' That the enuresis is to a considerable extent under the control of the will is shown in cases where the habit has been broken up by the sending of the child among strangers or to a boarding school, where the sense of shame has constituted an influence sufficient for the purpose. Numerous instances are also on record where a flogging has permanently broken up the habit.

8. Malformation of the bladder or its appendages. Dr. Madden has reported the case of a young lady who suffered from a constant dribbling of urine, both by day and night, in which he found, on examination, that there was a malformation of the right ureter, which discharged the urine from the kidney on that side directly into the vulva instead of into the bladder.

The prognosis, Dr. Smith said, naturally depended on the cause or causes of the trouble. When the affection was not controlled before, the influence of puberty or of marriage and pregnancy seemed to be well founded; but, of course, treatment was not to be delayed with any such idea in view. In the treatment the great point was to discover the cause. If the affection seemed to depend on the character of the urine, this was to be rendered as bland and unirritating as possible, and Dr. Smith said that since he had recognized the acid character of the urine as a frequent cause of incontinence he had been able to treat very satisfactorily quite a large class of cases which had formerly proved troublesome. It was his practice to endeavor to render the urine as bland as tepid water. If there was acidity he gave from three to five drops of liquor potassæ, well diluted, three, four, five, or six times a day, until the urine became neutral in reaction, and then to continue the alkali in just sufficient quantities to maintain the neutral condition.

When there was increased functional activity the great reliance was to be placed on belladonna. The tincture was the preparation commonly used in this country, and of this five drops might be given every night and morning, the dose being increased by one drop each day until the desired effect was obtained or the physiological action of the drug had become apparent. When belladonna was found efficient it was to be kept up for some weeks in full doses, and the quantity then gradually diminished. This agent had been highly lauded by Trousseau, who used it in large doses. Dr. Smith related a case in his own practice in which a girl eleven years old, who suffered from both diurnal and nocturnal enuresis, and who had previously taken belladonna and other remedies, was cured. The urine was highly acid, and the treatment which he prescribed was five drops of liquor potassæ three times a day (or more, if this was necessary to keep the urine neutral in reaction), and tincture of belladonna in nine-drop doses, the quantity gradually to be increased to fourteen or fifteen drops.

If the enuresis were due simply to the large quantity of urine secreted, the liquid food was to be restricted, especially toward evening, and if diabetes were present, of course the treatment appropriate to that disease was to be adopted. In diabetes insipidus ergot was found to be of great service. Suspicion of the presence of a stone in the bladder would be excited by painful micturition, increased quantity of mucus in the urine, and the sudden stoppage of the full stream. The use of the sound would confirm the diagnosis, and the stone could then readily be crushed. In every case of incontinence it was important to make a careful examination of the parts contiguous to the bladder, such as the rectum and the genital organs, for the existence of ascarides, phimosis, perputial adhesions, hardened smegma, etc. If the enuresis were due to paresis of the sphincter, a treatment very different from that of belladonna was required, and here ergot, either alone or in connection with nux vomica or strychnia, was found very useful in restoring the impaired innervation and stimulating muscular contractility. Two years ago, Dr. George B. Fowler, of New York, had reported two very interesting cases, in which there was fæcal incontinence also, treated with ergot in combination with strychnia. In one there was a relapse, which was successfully treated with ergot alone, given by the rectum. Here there was a markedly relaxed condition of the sphincter ani, indicating, no doubt, that there was also relaxation of the sphincter vesicæ.

A considerable number of remedies which were formerly employed to a large extent for incontinence of urine were now seldom used, but some of them were still deserving of confidence in certain special cases. Among these was strychnia. In children under four years of age there was some danger in giving it, and it was better to employ nux vomica under the circumstances, but above that age it was perfectly safe to use it. Tinc-

ture of cantharides, although as a rule an unpleasant remedy, could sometimes be employed with advantage if given in small doses. Cubeb and vegetable tonics and astringents were also sometimes called for. Dr. Smith then related a case reported by Eustace Smith, in which he successfully employed drachm doses of tincture of belladonna in combination with bromide of potassium and infusion of digitalis. It was to be borne in mind, however, that the English tincture of belladonna was only half the strength of the American preparation. Local treatment was often attended by a satisfactory degree of success, and the best agent for the purpose was nitrate of silver, applied for the cauterization of the neck of the bladder. Having referred to the use of baths and douches, Dr. Smith closed by speaking of the suggestion of Trousseau, that the patient should be required to urinate as frequently as possible during the daytime.

DISCUSSION.

Dr. Wm. Detmold thought that in the majority of instances nocturnal enuresis was simply a vicious habit, but one which was very difficult to get rid of. He did not believe it was advisable to use the term incontinence of urine in this connection. The condition is one of enuresis, and not properly incontinence, true incontinence being indicated by a constant dribbling of the urine, both by day and night. This was observed in patients where there was some organic defect, as in the case of Dr. Madden, referred to by Dr. Smith, where the right ureter discharged into the vulva. When medicine had an effect in nocturnal enuresis he thought that it was simply a moral effect, produced by the fear of the doctor or the nauseousness of the dose. The more unpleasant the remedy, therefore, the more efficacious it was likely to be.

Dr. J. W. S. Gouley said that he thought Dr. Smith's anatomy and physiology needed a little revision. There was no sphincter vesicæ in the same sense anatomically as physiologically, the so-called sphincter vesicæ not being at all comparable to the sphincter ani. Forty years ago it had been demonstrated beyond question that there was no such thing as an anatomical sphincter to the bladder, though there was a distinct physiological one. It was not the circular muscular fibres, but the longitudinal and oblique ones which exerted this sphincter-like action. In regard to the compressors urethræ having any power to control the stream after it had once emerged from the bladder, as maintained by Dr. Smith, this was undoubtedly a mistaken idea, the physiological sphincter alone having any such control. He agreed fully with Dr. Detmold that the word incontinence, when applied to children who wet their beds, was incorrect, nocturnal enuresis being the proper term for this condition. The urine was passed, not because the bladder could not contain it, but because it had to hold too much. Dr. Smith had attributed to Professor Bartholow something which did not belong to him, as it was Jean Louis

Petit, who lived more than a hundred and fifty years ago, who first called attention to the cause of nocturnal enuresis mentioned in connection with Dr. Bartholow's name. Petit stated that there were three classes of children who wet the bed; (1) those who were too lazy to rise and urinate, (2) those who slept so soundly that the sensation of desire which precedes the act of micturition was not sufficiently strong to awaken them, and (3) those who dreamed that they were urinating. Trousseau had added a fourth class, namely, those who through fear would not arise to urinate, but this class of Trousseau's, as well as the first class mentioned by Petit, he thought ought to be excluded, so that there would remain simply the second and third classes just stated.

The most frequent causes of the enuresis were lithuria and polyuria, the latter being often met with in nervous children. Children, after they became two or three years old did not wet their clothing in the daytime, but only at night. In some instances such children retained the habit until they were grown, and he had seen men twenty-five, thirty and forty years of age who were still subject to it. No amount of whipping could cure a child of wetting the bed; on the contrary, corporal punishment could do harm and only make the condition worse. Lithuria was much more common in young subjects than was generally supposed. When this was present there was not an accumulation of urine, but a constant enuresis, both diurnal as well as nocturnal. Dr. Gouley said he did not at all agree with Dr. Detmold that treatment was of no service. On the contrary, he believed that there should be both general and local treatment. He thought, however, that it was a mistake to attempt to make the urine as "bland as tepid water," as Dr. Smith spoke of doing. This would only increase the enuresis, as very bland urine, like pure water itself, was known to be irritating to the bladder. Dr. Smith had spoken approvingly of lithority in cases of stone, but in children under the age of ten this operation had been tried and found wanting, lithotomy being in reality much more safe. As to cauterization, he trusted that Dr. Smith did not mean that this should be done with Lallemand's *porte-caustique*, as he regarded this as excessively dangerous. But in connection with the internal administration of iron, more particularly the old-fashioned tincture of muriate of iron, he had often afforded great relief by the introduction of the sound or catheter every two or three days. As a rule, the steel sound, if skillfully used, was preferable to the gum catheter. In both girls and boys (although the number of the former he had seen suffering from enuresis was quite small) he had observed excellent results from this practice, and he did not think Dr. Smith had mentioned the simple passing of the sound.

The Secretary, *Dr. P. Brynberg Porter*, said that he merely wished to call attention to the much greater tolerance of belladonna, proportionally, in children than in adults. In the *British Medical Journal* of Feb-

ruary 7, 1885, Dr. E. Paget Thurston had reported a case of nocturnal enuresis in a girl seven years old. At first she was given ten minims of tincture of belladonna three times a day, but this had no appreciable effect upon the condition. He then ordered the belladonna in drachm doses, one dose to be taken in the afternoon, and another four hours later, just before going to bed. The second night there was no enuresis, after which only one dose a day was taken, at bedtime, and this was continued for four more nights. The cure was then complete and permanent. He had himself also often noticed in giving belladonna what large doses children could bear without showing the constitutional effects of the drug. He would like to ask Dr. Smith whether he had had any experience with chloral hydrate in nocturnal enuresis. During the last few years this agent had been highly lauded in this condition, and he had personally tried it in a number of cases where the affection did not seem to be dependent on any removable local cause. While, however, in certain instances it had seemed to afford partial relief, as a rule he had been disappointed in regard to its action.

Dr. E. G. Janeway made some remarks in which he said that from his own experience he could abundantly confirm the truth of Dr. Porter's assertion in regard to the very marked tolerance of belladonna in children.

Drs. C. S. Wood, F. V. White, and T. R. Varick, of Jersey City, also participated in the discussion, which was brought to a close by Dr. Smith.

Dr. Smith said that in his account of the anatomy and physiology of the bladder he had derived his information from some of the highest authorities, and that for the statement in regard to the action of the compressor urethræ Belfield was responsible. In regard to the rendering of the urine bland and neutral in reaction, the good results which he had obtained since he had adopted this practice were sufficient, he thought, to justify him in continuing its use. He fully agreed with the gentleman who had spoken in reference to the greater tolerance of belladonna in children, as was also the case with arsenic. In regard to chloral, he said that he had not tried it in this connection, but it seemed to him that if it was given in nocturnal enuresis it would only tend to aggravate the trouble by inducing more profound sleep. He agreed with Dr. Varick that it was very important that a very careful study of the probable cause should be made in every case presented for treatment, and on this point he said he could not speak to strongly.

By the showing of scientists, and the experience of parents, physicians, and nurses throughout the country, the claims of Mellin's Food have been thoroughly established. It is in the form of a dry powder, the concentration of nourishing properties, consisting entirely of soluble and assimilable matter, the bran, husks, and bulky indigestible portions having been extracted by careful scientific process.

AMERICAN MEDICAL ASSOCIATION.

Thirty-sixth Annual Meeting, New Orleans, 1885.

THE ADDRESS IN OBSTETRICS.

A BRIEF REVIEW OF THE GROWTH OF MCDOWELL'S OPERATION DONE AT DANVILLE, KY., IN 1809; ITS PRESENT STATUS.

Delivered Wednesday, April 29, by *R. S. Sutton, M.D., LL.D.*, of Pittsburg.

In the bleak cold of a December day, in 1809, a woman riding on horseback, arrived in Danville Kentucky. She had taken farewell, perhaps forever, of relatives and friends, and had just completed a journey of sixty miles that she might be near a surgeon who had promised to open her abdomen and attempt to remove the large ovarian cyst it contained. She was to be the subject of an experiment—an experiment at the hands of a surgeon living on the borders of civilization — an experiment which would involve her life, and to which she must submit without the blessing of chloroform or ether. This woman possessed of marvelous courage was Mrs. Crawford, McDowell's first patient in ovariotomy, and the first patient upon whom the operation was ever deliberately undertaken. She recovered and lived to the advanced age of seventy-nine years, a period of thirty years beyond the operation.

The conditions surrounding and forming part of this operation are worthy more than a passing notice. At the present time they are declared by the ablest operators to be of more than accidental importance.

In the light of all the recent advances concerning the environs of an ovariotomy patient, I ask you to listen thoughtfully and inquire of yourselves: Have modern operators had better environment than McDowell? Is their quarantine better than his was? Whether accident or necessity, or the simplicity of border life provided these conditions so favorable to recovery your orator will not inquire, but hopes to show that Dr. McDowell did operate under conditions as favorable as does Mr. Keith or Mr. Lawson Tait.

1. The patient was refused operation in her own home.
2. She was operated upon in Dr. McDowell's own house.
3. History mentions but one assistant present at the operation.
4. The patient had never been tapped.
5. We may safely infer that the room in which the operation was performed contained, at this early date in Kentucky no superabundance of furniture or upholstery.
6. That the room was ventilated by an open fireplace is more than probable.
7. The atmosphere was that of a healthy border town.
8. No sponges were introduced into the abdomen.
9. He ligated the pedicle and dropped it in.

This operation will stand the criticism of the most exacting specialist of the year 1885, save in two particulars, viz.: the ligature was not carbolized or scalded, the ends of it were left hanging out of the lower angle of the wound; and merely turning the woman on her side to permit all fluids to escape from the cavity of the abdomen was scarcely enough in this direction.

The incision was made to the left of the rectus muscle; but in his next case Dr. McDowell made it in the linea alba, between the umbilicus and pubis.

Pause a moment! Think, at the end of almost three quarters of a century, the operation stands almost where McDowell left it, with one solitary exception, viz.: the ends of the ligature surrounding the pedicle are cut short.

Restless human nature, not satisfied, sought other means of treating the pedicle, a review of which is fraught with good instruction. For eleven years the operation remained in the hands of McDowell, and he adhered to ligation of the pedicle, leaving the ends of the ligature hanging out of the lower angle of the wound. In 1820 Chrysmar, of Würtemberg tied the pedicle in two portions, leaving the ends of the ligature hanging out of the lower angle of the wound. In 1821 Nathan Smith of New England tied the pedicle with "strips cut from a kid glove;" he cut the ligature off close to the knots and dropped the pedicle into the abdominal cavity.

Neither Chrysmar nor Nathan Smith knew anything of McDowell's operations. Were the teachings of Hunter and John Bell working upon other minds as well as upon the mind of Dr. McDowell? The last named sent to Mr. John Bell of Edinburg an account of his cases. Mr. Bell being then in Italy his colleague, Mr. Lizars, received the report. It is probable that this report was received in 1818. For six years Mr. Lizars kept it to himself. He attempted ovariotomy four times and succeeded in one case, the patient surviving the operation seventy days.

In one case he opened the abdomen by an incision reaching almost from the ensiform to the pubis, and thrust his hand into an empty belly. He requested every one of his students to put his hand into the abdomen, and finally exclaimed, referring to an army officer present: "Where is the military gentleman?" and had him make the same manual exploration. Mr. Lizars then closed the wound, *and it healed by first intention.*

Owing to the fact that Mr. Lizar's results were bad, twenty years elapsed before ovariotomy was again attempted in Scotland. In 1845 Dr. Handyside performed it. Another halt of seventeen years occurred, bringing us up to 1862, at which date but one success had been attained in Scotland. In that year Dr. Thomas Keith did his first operation.

Let us now cease the pursuit of Dr. McDowell's operation, as it was reported to Mr. John Bell, which report the latter did not live to see.

Up to the year 1843 I find the records of only eighteen completed ovariotomies in America. In this year Dr. Alexander Dunlap, of Springfield, O., and Dr. John L. Altee, of Lancaster, Pa., did their first cases, the latter removing both ovaries. Eleven years later (1855) Dr. Kimball of Lowell, began operating. These three are now the only living pioneers of the army. May they long live to enjoy the distinction!

The operations in the United States were already numerous, and the stability of the operation secured. This was before Sir Spencer Wells did his first ovariotomy.

It is estimated by Peaslee that up to the last quarter of 1863 over three hundred ovariotomies had been done in this country. At this date Dr. Keith was only beginning in Scotland; the operation was performed for the first time in Russia, and was only a year old in Italy. Twelve years after the death of Dr. McDowell, in 1842, Dr. Charles Clay, of Birmingham, England, did the first operation in that country; prior to this time Jeaffreson, Walne, King and West had each removed by abdominal section parovarian cysts. In 1851 Baker Brown began operating at St. Mary's Hospital, London; his results were not good, and the intense opposition of his colleagues drove him from the hospital; he then founded "The London Surgical Home," where his results compared favorably with those of any other surgeon of his time. *It was mainly due to his action that the practice of performing ovariotomies in large hospitals, where isolation is impossible, ceased.*

From Baker Brown, Nélaton learned the operation by personal observation, and returning to France related in a public lecture how he had seen Brown do five cases, three of them in a single day, and thus through the influence of Brown on Nélaton the opposition to ovariotomy in France was largely diminished. In 1854 Baker Brown taught Sir Spencer Wells the operation, and in 1857 Sir Spencer Wells did his first operation. In 1864, according to Sir Spencer Wells, the operation was completely established in London, and, we may add with pride, in every country in the civilized world.

But while the surgical world recognized the operation, there was a diversity of opinion with regard to the treatment of the pedicle. From the date of Dr. McDowell's first operation up to 1821, when Dr. Nathan Smith operated, the ends of the ligature were brought out at the lower angle of the wound; Dr. Smith was the first to cut the ends off. For sixteen years afterward no other method was offered. In 1837 Stilling, of Cassel, in the province of Hesse-Nassau, Germany, used the cautery, and suggested stitching the pedicle to the wound.

Nine years barren of new suggestions again elapsed, when in 1846 Dr. Handyside, of Edinburg, Scotland, carried the ligatures through the culde-sac of Douglas into the vagina. In 1848 Stilling treated the pedicle outside of the peritoneal cavity. Two years later, in 1850, this method

was inaugurated in London by Mr. E. W. Duffin. The introduction of the extraperitoneal method by Stilling in 1848 began a long and serious conflict, which has happily died out with the method. Maisonneuve, of Paris, in 1849, had twisted the entire pedicle in one case, and Martin of Jena, had stitched the pedicle to the wound. About this time Langenbeck, stitched the pedicle to the wound, and covered it with skin from the margin of the incision.

Eight years later, in 1850, Dr. John L. Atlee, of Lancaster, Pa., introduced the écraseur to divide the pedicle. He was imitated by a number of prominent operators, notably by his brother, the late Washington L. Atlee, Sir Spencer Wells, Dr. Keith, Professor Pope, of St. Louis, U.S., and Professor Billroth, of Vienna. This year proved unfortunate for the operation, for during it Mr. Johnathan Hutchinson invented the clamp which perpetuated the extraperitoneal mode of treating the pedicle. In 1860, Sir James Y. Simpson secured the pedicle within the cavity of the abdomen by acupressure needles passed through the abdominal wall. About 1865, Koeberle, of Strasburg, invented his serre-nœud, or wire constrictor, with which he grooved the pedicle prior to applying the ligature.

In 1864, Mr. I. Baker Brown, of London, reverting to Stilling, of Cassel, established the use of the cautery, *a method rejected in London, taken up by Dr. Keith, and now credited through him with the best statistics yet attained by any operator.* In 1868, Masslovsky, a Russian, amputated the pedicle by double flaps, one on each side, and stitched the flaps together. In 1869, Dr. McLeod, of Glasgow, Scotland, by means of two pairs of strong forceps, twisted the pedicle entirely off. During this year, Dr. Peaslee invented a scabbard and knife by means of which the pedicle was secured, the ligature traversing the scabbard. After forty-eight hours the ligature was cut by introducing the knife into the scabbard, when both ligature and scabbard were withdrawn. In 1870, Dr. Thomas Addis Emmett reported eighteen cases in which he had secured the pedicle by means of silver wire.

Up to the present year (1885), every conceivable thing has been done with the pedicle. It has been tied entire; tied in sections; been twisted off; burnt off; crushed off; cut square off; cut off in flaps; left inside; left outside, and has been made to slough off. The extraperitoneal method of treating the pedicle is gone. The question is now resolved into the merits of the ligature cut short, the Dr. Nathan Smith method, or the clamp cautery, as introduced by Mr. I. Baker Brown, of London, in 1864. If the clamp as devised by Mr. Johnathan Hutchinson was a bad instrument, and according to Mr. Tait, reduced the statistics that Sir Spencer Wells should have attained, it must have similarly affected the results of those who have employed it in the United States. Recently ligation and cautery have given almost equal results.

The operation of Dr. McDowell in so far as it relates to the treatment of the pedicle, is, therefore, triumphantly where he placed it, despite the ingenuity of the surgical world, having undergone but a single alteration, namely, Dr. Nathan Smith's improvement of cutting the ligature short. I have not been able to learn anything as to the extent that sponges were used by the pioneer operators. When Dr. Keith was about to do his first operation, he had the water to be used boiled the night before, and he made everything scrupulously clean, during the operation he was surrounded by old practitioners.

After removal of the cyst, he thrust a big sponge into the abdomen, and brought it out full of fluid. As he was about to repeat this, one of the doctors seized his arm, and exclaimed, "For God's sake don't do that again." While he hesitated, the others argued that any fluid left in the body would be a nice protection to the intestines. He closed the wound. Subsequently the patient did badly. He at once opened the wound and let out a pint of dirty fluid and the patient recovered. From that time he advocated careful sponging after the operation, *and he was the first to insert a flat sponge under the wound while the stitches were being placed.* Koeberle, who also began to operate in 1862, *introduced the compression forceps and drainage, first by short and later by long glass tubes.*

I here show you the Baker Brown cautery clamp, used by Dr. Keith, the compression forceps of Koeberle, *also the modification by Sir Spencer Wells*, and the drainage-tubes so much in use by operators in Great Britain.

Technique of McDowell's operation is, probably, complete, *and its future will depend on the subject, the place of application, and the care taken to protect the patient from extraneous sources of danger.* It may be compared to a mighty oak, each decade of years having added to its greatness until its far-reaching branches furnish shelter for the thousands of men and women who require abdominal section. Its ramifications are hysterectomy for fibroids, hepatotomy, cholecystotomy, normal ovariotomy, the Hegar-Tait operation for the removal of both ovaries and tubes, nephrectomy, exploring incisions, gastrotomy, and enterotomy. It still continues to grow, and the task of pointing out the leaves that have been added to its foliage during the last year requires our efforts ere they fall about the roots and contribute themselves to the growth of the parent tree.

Valuable lectures and papers have been given by Dr. Keith, Mr. Lawson Tait, Mr. Savage, Sir Spencer Wells and Mr. Bryant, all in the *British Medical Journal.*

The results of valuable experiments on lower animals have been published by Prof. C. T. Parkes, of Chicago. Many successful cases of the Hegar-Tait operation done by our countrymen, and the surgeons of Great Britian, have been published in various journals.

Mr. Thornton has been successful in gastrotomy for the removal of a large foreign body, and has had seventeen successful cases of nephritic surgery, ten of these being nephrectomy by abdominal section. Drs. Keith and Bantock continue to do supravaginal hysterectomy with unparalleled success, and it is promised that, if their success continues, it will elevate their method of operating beyond the reach of controversy. They both adhere to the extraperitoneal treatment of the stump, while the continentals practise the intraperitoneal method.

The recent visit of Mr. Lawson Tait to the United States, has given a great impetus to the Hegar-Tait operation for the removal of ovaries and tubes for the cure of the fibroids of the uterus.

For the purpose of encouraging the conservative abdominal surgeons, *those who look carefully to the environment of their patients*, I point with great pleasure to the fine statistics of Dr. John Homans, of Boston, and of Dr. Robert Battey, of Georgia, whose early initiation of normal ovariotomy was suggestive eventually of the Hegar-Tait operation which included the tubes.

Ovariotomy and its offshoots comprise almost, if not the entire field of abdominal surgery. The establishment of the parent operation brought out the others, if not for the first time, it revived and established them after they had been practically abandoned. "The seed was sown by Bell and Hunter, carried by McDowell, and planted in Kentucky; its first growth was slow, but gathering strength from the passing years, its top has risen high, and its great branches cover a wide space, where unfortunate men and women of every land and clime gather to find relief from suffering and to acquire new leases of life.

The carbolic spray is still a matter of dispute. In Great Britain, Mr. Thornton adheres to it as of old, Drs. Keith and Bantock, and Mr. Tait will have none of it. The latter said to me, "I sold out all my right, title, and interest in Listerism, with my tea-kettle to Battey."

So far as I know, the best statistics yet obtained in ovariotomy in the United States belong to Dr. Battey, of Georgia, and Dr. John Homans, of Boston, Mass., both of whom operate under the carbolic spray, and in apartments kept especially for abdominal operations. I make special mention of the fact that these gentlemen use the carbolic spray, for the reason that Dr. Emmet says in his last edition, p. 715, "I do not know of any prominent operator in this country who now uses the spray," evidently an oversight.

I do not use the spray myself, but look upon the entire Lister system, less the spray, as firmly grounded in the surgical mind. Cleanliness and Listerism can never be separated, for "Listerism is the gospel of cleanliness;" without the latter you cannot have the former.

The year has wrapped up in its eternal folds one whose name is synonymous with the surgery of women; one whose reputation is immortal,

who in America at least, stood next to McDowell; beloved by his own countrymen, honored by the entire surgical world. No eulogy of mine can increase his fame. I speak of *the great, the good, the pure, the noble, the generous* Marion Sims. Like McDowell, he possessed a genius for origination, and will share with him the admiration and plaudits of future generations.

Section on Obstetrics and Diseases of Women.

Tuesday, April 28th.—First Day.

Dr. R. S. Sutton, of Pittsburg, Chairman, called the Section to order.

Dr. Wm. H. Wathen, of Louisville, read a paper on the

Treatment of the Secundines in Abortion and Labor,

of which the following is the abstract:

Three methods have been urged: (1) The expectant method; (2) The immediate removal; (3) A course, intermediate. During the first two months of pregnancy no placenta exists, and the egg, together with the decidua, is usually expelled in abortion *en masse*. Even in case of retention of membranes, during this period, no operative interference, of a radical character, should be instituted, as the fœtal envelopes are comparatively innocuous, and the danger from trauma is relatively great. From the third to the end of the seventh month, it is advisable to remove the secundines immediately, irrespective of the condition of the crevix as regards dilatation.

The retained placenta in premature labor, or labor at full term, should always be removed at an early period. If the os is dilated, the finger or curette suffices; if the os is not dilated, he employs a modification of the steel dilator of Scanzoni. The cervix can be dilated by this means to a width of two and one-half inches, and the secundines can be removed by the finger, curette, or forceps. Instead of the curette, a piece of copper, or iron wire properly curved may be used. The separation of amnion from chorion, without rupture of bag of waters, as recently pointed out by Dr. Sawyer may occur. This is a subject to which text-books do not allude. In the third stage of labor, if the placenta was not spontaneously expelled within thirty minutes, it should be removed. He had no confidence in the Strasburg method of treatment in the third stage. The old method of the application of the *vis a fronte*, by traction on the cord, and Credé's method of the application of the *vis a tergo* by expression, should be combined.

Dr. James R. Chadwick, of Boston, said it was impossible to formulate a universally applicable rule. The treatment during the first two months should be governed by the history of the case. If the woman was a "bleeder," immediate operative interference should be instituted; if she had had previous abortions, it was advisable to temporize. Placental

forceps were absolutely worthless; the best instrument for the removal of the secudines, as insisted upon by Dr. Sinclair, of Boston, was the finger. The finger was also the best dilator.

Dr. Green, of Kentucky, pursued the intermediate course, as illustrated by the history of a case of abortion in the fourth month, with retention of fœtal envelopes.

Dr. Sinclair, of Boston, agreed with Dr. Chadwick, that manual dilatation of the cervix is the best method. When the os is contracted, the fibres will usually yield to the finger in from six to eight minutes. He is in favor of immediate removal of the secudines.

Dr. Carroll, of Texas, referred to the fact that the retention of a small shred of decidua or of a clot of blood is sufficient to cause alarming hemorrhage. He would not hesitate to use an Ellinger's dilator in case of non-dilated cervix, but the finger is a better instrument.

Dr. Wathen closed the discussion by saying that he advised the use of his own modification of Scanzoni's dilator only in extreme cases in which the finger had already been employed without effect.

Dr. W. W. Potter, of Buffalo, N. Y., reported the following case of

PARAMETRIC ABSCESS:

Mrs. B. 38 years old, the mother of three children, experienced sudden pain, 17th March, 1874, in the region of the right ovary, accompanied by nausea. On vaginal examination, the right broad ligament was tender. Temperature 101°; pulse 110. Hot vaginal douche, morphine and atropine hypodermically, quinine per rectum, were suggested. The symptoms continued unabated until the 28th, when she was etherized. An incision was made into the cul-de-sac of Douglas, per vaginam, and three pints of fetid pus liberated; a drainage tube was inserted. The cavity of the abscess was washed out with antiseptic solutions of bichloride of mercury and carbolic acid. The condition of the woman continued to be desperate until an emulsion of iodoform was injected, when she began to improve, and was restored to her original condition about May 1st, thirty-three days after the operation.

Dr. Potter called attention to the following points of interest in connection with the case:

1. The rapidity of the formation of the parametric abscess in the non-puerperal state.
2. The rapid closure of the abscess cavity by granulations.
3. The large amount of pus (three pints) evacuated.
4. The beneficial effect of the idodoform emulsion.
5. The possible influence of cotton-root and gin, advised by a friend of the patient, as an etiological factor.

After a careful review of the pathology and eitiology of abscess in the pelvic connective tissue. Dr. Potter advised the vaginal operation for

the evacuation of pus, the cleansing of the cavity by the curette, as suggested by Byford, when necessary, and subsequent daily irrigation of the abscess cavity by the physician himself.

CHRONIC PERIUTERINE ABSCESS: ITS TREATMENT BY LAPAROTOMY,

was the title of a paper by Dr. Christian Fenger, of Chicago, which in his absence was read for him by Dr. W. W. Jaggard, of Chicago. It was based upon the observation and treatment of three cases of chronic periuterine abscess.

I. Technique of the Operation.—Before making the abdominal incision, the site of the bladder should be marked out by the introduction of a sound. If adhesions have formed between the sac and abdominal wall, the operation is extraperitoneal and simple. Such cases are exceptional. In the majority of cases, when the abscess is lateral or posterior to the uterus, it can be reached only by opening the peritoneal cavity—that is, by laparotomy, for which preparation has always to be made, since it is impossible to make a clear diagnosis beforehand as far as this point is concerned.

When the abdominal cavity has been opened, it is usually possible to come right down on the sac of the abscess. If covered by omentum or intestines, these have to be pushed aside, and all possible adhesions ligated or detached. The upper surface of the sac, together with the uterus and appendices, will generally form a convex, red, smooth, more or less regular tumor, to the side of which, outward toward the brim of the pelvis minor, loops of intestine or omentum generally adhere; as it is not desirable to extirpate the sac, these parts need not be disturbed, if only a surface of two inches in diameter is clear—that is, space to admit of a sufficient opening being made into the sac, and of a sufficient margin round the opening for a double row of sutures to unite the edges with the anterior wall of the abdomen. When the upper surface of the sac is thus clear, or has been cleared, the next step is to find some way into the sac, with due regard to the prevention of the escape of pus into the abdominal cavity. To this end, it is necessary to pack two or three large disinfected sponges around the sides of the cleared space, at the same time preventing any loops of intestine from slipping out through the abdominal incision.

As a soft or fluctuating point on the surface of the tumor, especially when the abscess communicates with the rectum or bladder, or, more, rarely, with some remoter part of the intestinal canal, cannot always be found, an exploratory puncture with the needle of a hypodermic syringe has to be made, at the point and in the direction where, from the previous examination, we expect the abscess to be, or where the tumor feels less resistance than in other places. If pus is withdrawn, proving the existence of an abscess, it is advisable to effect as perfect an evacuation of the con-

tained pus as possible. An aspirator should be ready, so that the aspirator needle may be introduced along the needle of the hypodermic syringe, which is left in the cavity as a guide.

The aspirator needle is left in the cavity as a guide for the knife in the incision into the sac. This incision should be made by the thermo-cautery; the small knife-shaped burner of Paquelin answers the purpose very well. It is well to have a small sponge ready to thrust into the sac as soon as the incision is made, because some pus is likely to flow out as soon as the sac is opened. The edges of the incision are firmly grasped with the large artery forceps of Billroth, and dragged forward to check hemorrhage; sponges, saturated with ten per cent. solution of zinc chloride, may be introduced into the cavity; or, if necessary, the inside of the cavity may be scraped out with the sharp spoon or curette (Byford).

If counter-opening is desired, a strong curved forceps should be pushed down to the bottom of the sac till it can be felt through one of the vaginal cul-de-sacs, through which an incision is then made, by one of the assistants on the end of the forceps. The forceps is then pushed through the opening, and opened so as to dilate the latter. A heavy drainage tube is now grasped by the jaws of the forceps and up from the vagina through the sac and out of the abdominal incision.

The next step is then, after carefully cleaning the peritoneal surface of the sac, to unite the latter to the part of the abdominal wound nearest to it by a double row of sutures. Silk is used for sutures. The deeper row, about one-quarter of an inch from the edge of the opening into the sac, and not penetrating the whole thickness of the wall of the latter, unites the peritoneum of the sac with the peritoneum of the anterior wall of the abdomen. These sutures must be sufficiently near to each other (less than one-quarter of an inch apart) to close up the peritoneal cavity hermetically. The outer row of sutures passes through the entire thickness of the abscess wall, along the incision into the sac, and through the whole thickness of the abdominal wound, thus uniting the edge of the skin with the inner wall of the abscess cavity.

The question as to whether or no drainage tubes should be inserted into the abdominal cavity, depends entirely, as in all other laparotomies, upon the amount of detached adhesions. But in laparotomy for abscesses, it is more desirable not to have a drainage tube in the abdominal cavity, because of the danger of secondary infection from the fetid abscess cavity through the abdominal drainage tube, as it is practically impossible to effect a perfect seclusion between the abdominal tube and the tube leading into the abscess. Such a necessity may, however, arise, and then the best course possible under the circumstances is to be pursued.

Heavy antiseptic dressing should be applied over the abdomen, and also an intra and extra-vaginal dressing sufficient to cover the drainage tube in the vagina. Iodoform is especially valuable when communica-

tion with the rectum makes it possible that feces will come into contact with the abdominal wound. The dressing should be changed at least once a day, and the sac washed out with an antiseptic solution; a saturated solution of boracic acid is preferable, as there is then no danger of poisoning.

The question as to the safety of performing the whole operation at one sitting, in opposition to the method of Volkmann in the treatment of abscesses of the liver (union of the surface of the sac with the anterior abdominal wall, before the sac is opened), will depend, to a certain extent, upon the skill of the operator. Lawson Tait's record of thirty operations, each at one sitting, without a single accident, may be considered as a definite answer.

A tangible difference between a periuterine abscess and an abscess in the liver exists. The liver participates in the respiratory movements; the periuterine abscess does not. The wall of an abscess of the liver is friable, and furnishes a very insecure substratum for the application of sutures, while the walls of the periuterine abscess are thick and solid.

Regarding effective drainage of a periuterine abscess, the counter-opening through the vagina appears inexpedient from the experience of Lawson Tait and the reader of the paper. If, in the course of the after-treatment, rise in temperature and the accumulation of pus in the lower part of the sac should demand it, a counter-opening in the vagina can be made.

[TO BE CONTINUED.]

Abstracts and Selections.

I.—GYNECIC.

Abdominal Surgery for 1884.—J. E. Burton, Surgeon to the Liverpool Hospital for Women, contributes the following to the *Medical Press and Circular:*

Following the wholesome practice of some surgeons to special hospitals, I here propose to give a short report of all the cases of surgery, in which the abdomen was opened, that were under my care in the hospital for the year 1884. Although the number is far short of what some surgeons can boast of, numbering, in fact, but twelve, every case has an interest of its own, and as the year was the first full one of the hospital's existence, perhaps in point of numbers even there is not much to complain of. I propose first to go through the cases in the order in which they occurred, then to classify them, and afterwards to submit the few remarks they appear to me to call for.

I. *Umbilical Hernia with Adherent Irreducible Omentum.*—The patient, S. H., æt. 52, was admitted on April 15th. She was a short fat woman presenting a large hernial protrusion at the umbilicus, that had existed for eighteen years. As no truss was of the slightest use, and as operations for the radical cure of the disease had, upon the whole, been very successful, I determined to give her the chance afforded by operative surgery. On the 21st, I cut down upon the sac, opened it cautiously, and after ligaturing and freeing several pieces of adherent omentum, some of them as large as the finger, I returned the ligatured ends, and closed the peritoneal opening as after ovariotomy, except that I first brought the edges of the peritoneum together by strong sunk catgut sutures, and then put in a deep layer, but not passing through the peritoneum and finally a row of intermediate superficial ones. No redundant tissue was removed. The highest temperature recorded was 102° at 11 p.m. on the 23d. Later on a good deal of melting down of the fatty portion of the redundant tissue took place, and some stitch abscesses formed, both retarding convalescence, but neither at any time made the ultimate result doubtful. The amount of retardation in convalescence may be judged of by the fact that she was not discharged from hospital till June 12th, when she went out provided with a well-fitting abdominal belt. She was last seen on January 3d, 1885, when no signs of recurrence of the protrusion were visible, although the cicatrix had undoubtedly "given" somewhat, and the patient expressed herself as feeling much better for what had been done and, in fact, quite well.

II. *Large Uterine Myomata.*—The patient was a woman, æt. 28, the wife of a farmer in Westmoreland. She had been married only eight months, and had had neither child nor miscarriage. Menstruation began at fourteen, and had always been regular but scanty, until about two years ago, when the flow began to grow profuse and gradually got worse. Since Christmas it has been almost constant. She was admitted into hospital on May 29th. She was then very anæmic and weak, and had a large soft abdominal tumor, indistinctly fluctuating, reached to within an inch of the ensiform cartilage. The urine was albuminous and had a specific gravity of 1005. Some doubt existed, even amongst experts, as to the nature of the tumor, some being convinced that it was ovarian. On listening with the stethoscope, however, I found a souffle over a great part of the tumor, and a milky fluid could be pressed out from the nipples. These were also in an erectile condition, and the darkened areola and prominent papillæ, said to indicate pregnancy, were well marked. Taking all the symptoms presented into account, I had no doubt we had to do with a case of uterine enlargement from fibromata or myomata, and that if the tumor was not removed, the proper course was to remove the uterine appendages. Bearing in minds the doubts that still existed in some minds as to the nature of the case, it was decided

that an exploratory incision should be made, and that the further steps to be taken should be decided by the condition of things thus demonstrated. This was done on June 5th in the presence of the hospital staff, including Dr. Grimsdale, consulting surgeon to the Hospital, Mr. Bickersteth, and Dr. Hopper. The tumor was found to be a very soft myoma, with the broad ligaments and fallopian tubes proportionately enlarged. I succeeded without very much difficulty in removing the appendages of both sides. Two hours after the operation the temperature was 96.2°, and the pulse 104. At 11:45 it was 99.6°, pulse 108. From 12:30 p.m. on the 6th it gradually worked up to 103.4°, pulse 112. It afterwards fell a little, but on the 7th it reached 104.4°, pulse 140. She died the next day. The post-mortem examination was made by Dr. Davies. Diffuse peritonitis was found in the abdomen. On lifting the tumor out from its bed it was seen that there would have been no difficulty in removing it. Perhaps this would have been the proper treatment. The ureters were both found to be widely dilated, the right enormously so, being quite the size of an ordinary man's wrist. The left was about as thick as the thumb. The right kidney was simply a large cyst with a wall that tore on the slightest traction, and the left was but little better. On discovering the state of the urinary organs the untoward result of the case ceased to excite any wonder. Recovery, even temporary, was of course out of the question with the existence of such a condition of affairs. The case was, in fact, one of the "too late" series of which but too numerous examples still come under the notice of the surgeon.

III. *Ovarian Tumor*, in which rupture of a large cyst had taken place at least two months before operation. This case was reported at page 132, volume 2, of the *Medical Press* for last year.

IV. *Malignant Disease of the Anterior Abdominal Wall.* — The patient, E. A., æt. 33, was sent by Dr. Brewer of Birkenhead, with a history of an abdominal tumor of some months standing. Some history of a blow (kick) could be elicited, after which she suffered pain and subsequently enlargement of the part injured. When she first came under notice, the swelling, which was evidently seated in the anterior abdominal wall, occupied a space, roughly speaking, the size of a man's hand, extending from the margin of the ribs on the left side, across the middle line, passing in a slanting direction and within an inch or two below the umbilicus it could be felt an inch to the right of the linea alba, and filling up the iliac fossa of the left side. It was hard to the touch and tender, so that manipulation always caused a lingering pain that lasted twelve or more hours. She was admitted on August 18, and kept under observation until September 17, before anything was attempted. On this date an exploratory incision was made in the middle line, midway between the umbilicus and pubes. Structure evidently malignant was cut through, and on passing the finger into the peritoneal cavity the tumor was felt pushing back the

peritoneum and projecting about half an inch beyond the peritoneal level into the abdominal cavity. As such an extent of surface was involved, it appeared to me impossible to bring the edges of the anterior wall together in case of removal, so I was reluctantly compelled to leave the patient to her fate. The wound healed readily, the highest temperature recorded was 99·4 on the 22d, and the patient left the hospital on October 2d. I learned that she died some time towards the end of the year.

V. *Umbilical Hernia.*—The patient, A.W., was a fat woman æt. 56. A few days before admission my colleague, Dr. Davies, was called to her and found her faint from loss of blood, from ulceration of a vessel in the summit of a hernial protrusion from the umbilicus. The bleeding was quickly controlled by a pin passed beneath the vessel and a ligature beneath it. On September 8th I cut down on the sac, opened it, returned the loop of intestine, and closed the wound as after ovariotomy, paring away this time; however, all the redundant tissue, and thereby getting a fairly artistic and sightly wound. On the 9th, 7:15 p.m., the temperature rose to 101·9°; pulse 126. Antipyrine was now given, and the temperature quickly fell to 98·4 on the 11th. On the 14th it was again up to 101·2, but from this date it ranged slightly above or about normal until the wound was healed. She was discharged on Oct. 9.

VI. *Chronic Peritonitis.*—M.E.E, æt. 18, a pale, sickly-looking girl, a worker in a lint factory, was admitted on Sept. 1. She had been ailing several weeks, and on admission had a fluctuating abdominal tumor in the middle line, extending from two inches above the umbilicus to the pubes. Menstruation regular. Resonance was distinct in both flanks. The case was diagnosed as ovarian tumor, or encysted dropsy of the peritoneum, but I inclined to the first opinion, as there was no history of pyrexia, and a well-marked limiting wall could be felt *per vaginam* behind the uterus. The temperature ranged generally low, 97·4 to 98·4 until the 22d, when an exploratory incision was made. The peritoneum was found to be much thickened, and on opening it a large quantity of dark soapy liquid escaped. What now looked like a cyst wall came into view, and I was urged to tap it, but on percussion I found it to contain gas, and thus to be a loop of large intestine. In the meantime I was puzzled to know where I really was, and after some hunting about I asked my colleague to explore. On passing his fingers down into the pelvis he came upon the uterus and the ovaries, so that it was now clear that the cavity was the peritoneum, and that the disease was chronic peritonitis, in which the fluid was shut off by adhesion from passing all over the peritoneal cavity. I therefore sponged out, inserted a drainage-tube, and closed up the wound. An hour and a half after the operation the temperature had fallen to 96·4, pulse 100, but from this time it rose with but little interruption to 103 on the 23d, pulse 136. Antipyrine quickly brought down the temperature to below normal, 98 and then 97·8. On the 25d it again rose to 101·6, pulse 120. From

this time there was a rather wide daily range until Oct. 12, when it became normal. She was discharged Oct. 30. She presented herself in the out-patient's room in the end of January of this year. She was then quite well, and there was no sign of return of the disease.

VII. *Cystic Ovary.*—E. T., aged 35, was a married woman, who had suffered for several years with abdominal symptoms, chiefly pain in the pelvic region. She had been under treatment for so long a term and from such a number of medical men that medicinal treatment seemed to be of no avail. A small enlargement could, moreover, be felt behind the uterus, tender on pressure, which was diagnosed as either tubal or ovarian enlargement. She was accordingly admitted into hospital on September 22nd, and on October 2nd abdominal section was performed. A small cyst about the size of a walnut was found occupying the right ovary. This was removed. The other ovary on examination appeared to be healthy, so it was left. Convalescence was uninterrupted, and the patient was discharged on October 23rd. In this case, I regret to say, that I was unable to give the subsequent condition as regards relief from pain, as she has not reported herself, but at the time of her discharge she expressed herself as feeling quite well.

VIII. *Intra Pelvic Adhesions, Abdominal Sections, Adhesions broken through.*—R. S., aged 29, was a married woman who had not been pregnant for several years. Vaginal examination showed a left-sided laceration of the cervix apparently followed by sloughing. The laceration extended to the vaginal junction, and the loss of tissue had been so great that the edges of the cervix could not be brought into apposition without an undue degree of tension. Tracheloraphy was, however, performed in May in hope of restoring the cervix to tolerably healthy state, but the tension required to bring the edges together was so great that the lower stitches sloughed out, and the success was only partial. The symptoms were much relieved for the time however, and it was not till October 9th that she was re-admitted into hospital for further treatment. At the time the sloughing took place subsequent to the laceration, the inflammation had evidently extended to the intra-peritoneal parts, leaving behind adhesions which appeared to be the cause of the pains complained of. On October 13th the abdomen was opened, and the ovaries were found to be closely adherent to the broad ligaments and partially enfolded in them. The adhesions were broken down and the wound was then closed without removing the appendages. On the 17th, the temperature rose to 101·8 and antipyrine, was given, after which on the 18th it fell to 97·2. After this date it never rose above normal. She was discharged on November 4th. This patient was last seen on February 17th, 1885. There was then pain, but the epigastrium, and the breasts were also nodular and painful.

IX. *Dermoid Ovarian Cyst—Removal.*—E. P., aged 41, married 20 years, with one child 18 years of age, was admitted on Oct. 17, suffering from an abdominal tumor, which she had noticed for about two years. It was the cause of pain, and the general health had suffered considerably. Ovarian tumor was diagnosed. On the 27th operation for removal was performed. The tumor was discovered to be a dermoid ovarian cyst weighing altogether about 10 lbs., and consisting of two principal cysts, the larger containing a thick, soapy, chocolate-colored liquid, with a considerable quantity of cholesterine plates, and the smaller liquid fat with a large quantity of hair. The highest temperature recorded was 100·8, p. 104, on the 29th, until Nov. 8th, when it suddenly jumped from normal to 101, only to fall again as rapidly as it rose. Discharged Nov. 18th.

X. *Broad Ligament Cyst—Removal.* E. S., aged 55, widow, was admitted Oct. 28th with an abdominal tumor, diagnosed as a unilocular ovarian cyst. On the 31st abdominal section was performed, when a cyst came into view with dark-colored walls. The fluid that escaped on introducing the trocar was of the kind usually met with in simple parovarian or broad-ligament cysts. The operation presented no feature worthy of note. The highest temperature reached was 99·8, and that not until Nov. 10. Discharged Nov. 21st.

XI. *Double Pyosalpinx—Removal of Uterine Appendages.*—A. C., aged 31, admitted Nov. 20, had been married eleven years, one child, and no miscarriages. Had not been pregnant for ten years. Menstruation had been normal. Her symptoms have been present for ten years, but have been much worse the last twelve months. She has been under almost constant medical treatment. As she had heen so long under treatment without benefit, and as the Fallopian tubes were plainly moderately enlarged and very tense and painful, I determined to remove them along with ovaries. She was accordingly operated on Dec. 8th. The operation presented nothing noticeable. The highest recorded temperatures were 101·8 at 7 p. m. on the 11th, and 102·2 on the 24th. Discharged Dec. 31st.

XII. *Chronic Ovarian Pain, with Intra-Pelvic Adhesions—Removal of Uterine Appendages.*—E. P., aged 30, single, had been under my care in the out-patient department for dysmenorrhœa, constant pelvic pains, and a general condition of ill-health for over a year. The symptoms were of over seven years' duration, and during the whole of this period she had been unable to earn her living. She was admitted into hospital early in the year, and was treated by hot vaginal injections, saline purgatives, massage, and milk (5 oz. every four hours). She improved much in general health and weight, but her pains were unrelieved. After her discharge she continued as an out-patient until December, when it appeared that removal of the uterine appendages gave the only prospect of perma-

nent, or indeed, any benefit, as far as relief of pain was concerned. She was readmitted on Dec. 5th, and on the 22nd both uterine appendages were removed. A small pedunculated fibroid was found growing from the fundus uteri, but was not removed, as it was expected that removal of the appendages would check further growth. Recovery was uninterrupted, and she was discharged on Jan. 28, 1885.

Remarks.—The cases group themselves naturally as follows:

	No.	Died.	Recovered.
Umbilical hernia, operation for radical cure	2	0	2
Ovarian cystoma 2 / Dermoid ovarian cyst 1	3	0	3
Abdominal section and drainage	1	0	1
Broad ligament cyst	1	0	1
Removal of appendages	3	1	2
Simple exploratory incision	1	0	1*
Exploratory incision and breaking down adhesions	1	0	1
Total	12	1	11

*Died afterwards from progress of the disease.

Remarks.—As regards the operation for radical cure of umbilical hernia it has now been established on a tolerably firm basis. These are different from inguinal and femoral herniæ, inasmuch as when a truss is worn, it is on a part of the body in which there is no basis for counter pressure. It is very rare, therefore, for the truss to keep the intestine from protruding, and as a rule, the cases go from bad to worse. The danger from the operation is not great, certainly not greater than that of strangulation of the intestine sooner or later if operation be withheld, and probably not so great, and the cases are put into as good a position by the operation as they were in before the hernia came on. This is all however; to say that they are absolutely and perfectly cured would be going too far, for the same causes that produced the rupture in the first instance, might not unlikely produce a return of it if care were not taken to prevent it. For the permanent success of the operation then it is necessary that every patient after cure shall wear a firm and well-adjusted abdominal belt, and that this shall be exchanged for a new one, the moment it ceases to give the requisite support to the yielding abdominal walls.

The time is probably not far distant when medical men will send up their abdominal hernia cases for operation, as the condition is discovered, and it is well that they should, for as long as such a hernia exists, no one can say how soon strangulation may take place, or other complication arise, such as adhesion of intestine or omentum to some part of the sac that will reduce to some extent and possibly greatly the chances of recovery after operation.

With regard to the cystic affections nothing further need be said; their number is too small for any more detailed account to be of value.

The first case in the group of removal of appendage, was unfortunate, although as it was impossible to diagnose accurately, the condition of the kidneys and ureters, and, as moreover, the only hope for the patient lay in some operative measure, I still think the operation was justifiable. If I had declined to operate my decision would have been influenced by a selfish motive, viz., a desire to keep down my percentage of fatal cases, and I think that in our relation to our patients we ought to be influenced by higher motives than simply a desire to show a good list of successful operations.

The second case of removal of appendages was for double pyosalpinx, and the third for chronic ovarian pain and dysmenorrhœa. The cases are as yet too few to be of use in the decision of the question of the justifiability of the operation of removal of the uterine appendages. The operations themselves are too recently performed for one thing, and in one case after leaving hospital, the patient suffered from what is pretty certain to have been a more or less extensive peritonitis, and the other had as was stated a small pedunculated fibroid, which may for some time be a source of pain.

Concerning the exploratory incision, for malignant disease I have rather regretted since that I did not remove it, although a large extent of peritoneum was involved, as Sanger, of Leipzic, has recently shown that the peritoneum may be removed with impunity, and that its presence or absence affects but in the slightest manner, recovery after operation. The poor woman would at any rate have had a chance for her life, and as it was she had none.

In case viii I followed the example of Gusserow, of Berlin, who in several cases in which abdominal section was performed, removed nothing, and of which he reported that these were as much benefitted as others in which the appendages were removed. The pelvic pains are indeed now absent in my case, but others are present chiefly in the epigastrium, and both mammæ, in which small hard painful nodules can be felt.

Clittoridean Crises before the Pains of Progressive Locomotor Ataxia. — Pitres directs attention anew to the fact that locomotor ataxia is not infrequently ushered in or accompanied by attacks of voluptuous sensations in the female, which must be regarded as being analogous to the erections and spermatorrhea which are well known to occur in men in the early stages of the disease. The author reports three cases of tabes in which these attacks were observed. The first case is a woman aged 34 years, who was married, had two healthy children, and always enjoyed good health. She worked a sewing machine, and it became exceedingly disagreeable to her, because in moving the pedals the rubbing of the thighs

against one another provoked attacks of voluptuous sensations, with erections of the clitoris and ejaculation, just as occurs in natural coitus. These attacks occurred spontaneously and in the absence of any erotic thoughts and sometimes occurred as often as three or four times in the same day, but a succession of attacks was often followed by a free interval of one or two weeks. Each attack was followed by great languor and distaste for food. It was not until four years after that the lancinating pains and other symptoms of locomotor ataxia manifested themselves.

In the second case the attacks of sexual excitement began about a year before the commencement of the other symptoms; but in the third case the woman suffered from these voluptuous sensations for ten years before the characteristic lancinating pains began in the lower extremities. The author concludes that when females suffer from spontaneously recurring attacks of voluptuous sexual sensations, locomotor ataxia ought to be suspected in the absence of any other symptoms, and a diagnosis of tabes may be made with certainty if these attacks are accompanied by such symptoms as absence of the patellar tendon reaction, lancinating pains, gastric crises or ocular troubles.—*Manchester Med. Journal.*

II.—DISEASES OF CHILDREN.

Large Doses of Belladonna in Incontinence.—Dr. E. Paget Thurston, in the *British Medical Journal*, Feb. 7, 1885, says:

"Kate C., aged seven, a delicate child, whose legs were so curved by rachitic deformity that she was scarcely taller than an average child at four years, had been troubled with nocturnal incontinence since her birth. Various plans had been resorted to by the mother without success.

"She was ordered ten minims of tincture of belladonna three times a day. I heard nothing more from her parents, but a fortnight after I happened to meet the mother, and was told the medicine had been persevered in for six days without any appreciable result, and it was evidently looked upon as a hopeless case. I persuaded the mother to try once more. This time I ordered the belladonna in drachm doses, one dose to be taken in the afternoon, and one four hours later, just before going to bed. These doses caused excitability and a little wandering. After that, only one dose a day was taken at bedtime, and this was continued for four more nights. The cure was complete and permanent. Upwards of four months have elapsed, and there has been no recurrence of the trouble.

"*Remarks.*—There can be no doubt, in this case, that the taking of the belladonna and the curing of the incontinence were cause and effect. It is a very clear instance of the different effect of the same drug taken in different doses."—*Phil. Med. and Surg. Reporter.*

Gossip.

OHIO STATE MEDICAL SOCIETY.—The fortieth annual meeting of the Ohio State Medical Society will be held at Dayton, Ohio, on June 3d, 4th and 5th, 1885.

OFFICERS:

President—J. C. Reeve, Dayton.

Vice-Presidents—[1]E. B. Pratt, Mt. Sterling; B. W. Davis, Marion; D. J. Merriman, Painesville; J. F. Baldwin, Columbus.

Secretary—G. A. Collamore, Toledo.

Assistant Secretary—E. C. Brush, Zanesville.

Treasurer and Librarian—T. W. Jones, Columbus.

Committee of Arrangements—J. M. Weaver, E. Jennings, H. S. Jewett, A. H. Iddings, Geo. Goodhue.

The following is the order of business:

WEDNESDAY, JUNE 3, 2:00 P.M.

1. Call to order.
2. Report of Committee of Arrangements.
3. Business which requires early consideration.
4. Annual reports of
   a Treasurer and Librarian.
   b Secretary.
5. Reports of standing committees.
   a Committee on admissions and medical societies.
   b Committee on finance.
   c Committee on publication.
   d Committee on legislation.
   e Committee on ethics.
6. Reports of special committees:
   a Committee on State Board of Medical Examiners Bill.
   b Committee on general collective investigation of disease.
7. Reports from delegates to the American Medical Association and other societies.
8. Written communications on medical subjects:
   a "Pelvic Hematocele," C. A. L. Reed, M.D., Hamilton.
   b "Uterine Hemorrhage and its Treatment," J. W. Hoff, M.D., Pomeroy.
   c "Rare Complication after Ovariotomy," C. D. Palmer, M.D., Cincinnati.

THURSDAY, JUNE 4—MORNING SESSION.

1. Reading of minutes.
2. Reports of standing committees.
3. Papers.
   d "Some of the Complications of Strangulated Hernia," R. Harvey

[1] Deceased.

Reed, M.D., Mansfield.

e "Empyema," Dan Millikin, M.D., Hamilton.

f "Vesical Explorations;" P. S. Conner, M.D., Cincinnati.

g "Cases connected with Life Insurance Examinations and Remarks," I. N. Himes, M.D., Cleveland.

AFTERNOON SESSION.

1. Reading of minutes.
2. President's address.
3. Election of officers.
4. Selection of a place for the next meeting.
5. Reports of standing committees.
6. Papers:

h "Treatment of Spinal Irritation," Geo. W. Ryan, M. D., Cincinnati.

i "Diseases of Spinal Cord," Philip Zenner, M.D., Cincinnati.

j "Diseases of the Skin of Reflex Nervous Causation," Wm. T. Corlett, M.D., Cleveland.

FRIDAY, JUNE 5—MORNING SESSION.

1. Reading of minutes.
2. Reports of standing committees.
3. Papers:

k A paper, title not named, N. P. Dandridge, M.D., Cincinnati.

l "Occipito-Posterior Positions," H. G. Landis, M.D., Columbus.

m "Abdominal Sections," Rufus B. Hall, M.D., Chillicothe.

n "Voice," C. H. Von Klein, M.D., Dayton.

x Volunteer papers.

AFTERNOON SESSION.

1. Reading of minutes.
2. Reports of standing committees.
3. Written communications on medical subjects.
4. Oral communications.
5. New business.
6. Unfinished and miscellaneous business.
7. Adjournment.

The sessions of the Society will be held in Y.M.C.A. Building, No. 30 East Fourth street.

A competent stenographer will be in attendance.

Members will take notice that the meeting of the Society begins on Wednesday, and not Tuesday, as heretofore.

HOTELS AND RAILROADS.

Beckel House, $2.50 and $2.00; Phillips House, Dickey House, $1.50; Arlington House, $1.25 per day.

The following railroads will sell *return* tickets to members and delegates, who have paid full fare to Dayton, at *one cent per mile*, on presenta-

tion of certificate of attendance, to be obtained from the Secretary at the meeting, viz.: C., H. & D.; Ohio Central; C. H. V. & T.; C. C. C. & I.; D. & U.; N. Y. P. & O.; D. & T. and D. & I.

The following railroads will sell round trip tickets at *two cents per mile each way*, on presentation to local ticket agents of an order for the same, which will be furnished by the Secretary on application, viz.: B. & O.; P. C. & St. L.; Pennsylvania Company.

STANDING COMMITTEES.

(The member first named is elected for five years, the second for four years, etc.)

Finance—H. J. Sharp, G. S. Franklin, Davis Halderman, George Mitchell, S. S. Thorn.

Ethics—R. H. Reed, W. J. Scott, John A. Murphy, W. W. Jones, H. Culbertson.

Publication—W. J. Conklin, J. F. Baldwin, J. C. Culbertson, J. H. Lowman, W. H. H. Nash (and the President and Secretary of the Society, *ex officio*).

Medical Legislation—H. J. Herrick, D. N. Kinsman, Enoch Pearce, Toland Jones, H. J. Donahoe.

Admission and Medical Societies—C. A. L. Reed, S. W. Fowler, J.B. Thompson, J. W. Beach, P. P. Pomerine.

OXFORD RETREAT.

OXFORD, OHIO.

D. A. MORSE, M.D., Superintendent.

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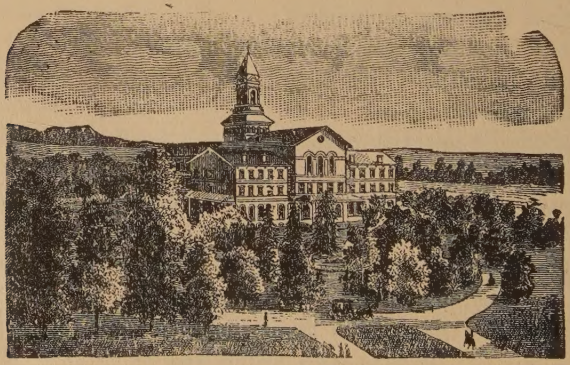

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